

*American*

# FRUIT GROWER

MAY

1947



HOUSING FOR  
ORCHARD HELP

**C**REIGHTON BROTHERS, like other leading farmers everywhere consider Firestone Champion Ground Grips a "must." They know the value of tractor tires that clean up to 100% more effectively... pull up to 62% more... last up to 91% longer under extreme conditions... and roll more smoothly over highways.

Patents permit only Firestone to make tractor tires with the curved, connected traction bars which give Champion Ground Grips their superiority. Curving the bars improves cleaning, gives them more effective penetration, and increases their strength. The Triple-Braced bars eliminate rapid wear from bending and wiping, and give the tires a "center bite" in the heart of the traction zone. And, instead of bouncing from bar to bar as is so true with broken center tires, Champion Ground Grips remain in smooth, continuous contact with the highway.

When you order new tractor tires, or a new tractor, specify Firestone Champion Ground Grips... the tires that outclean, outpull, outlast, and give a smoother ride. They cost no more than ordinary tractor tires.

*Listen to the Voice of Firestone every Monday evening over NBC*

## Like Other Champion Farmers, CREIGHTON BROTHERS Use **Firestone** **CHAMPION** GROUND GRIPS

Ten million eggs! Three quarters of a million chicks, many pedigreed, shipped to 22 states and several foreign countries! That is the number Hobart and Russell Creighton, Warsaw, Indiana, will sell this year from 60,000 White Leghorns housed last fall. Not always so large, their business has grown from a few hundred quality chicks bought on credit in 1925. Their progressive breeding, management and marketing program has so influenced the poultry industry in Kosciusko County, Indiana, that it today ranks first nationally in the production of market eggs. Their leadership extends to state and national affairs. Hobart Creighton, elected to eight terms in the House of Representatives of the Indiana General Assembly, served the last three as Speaker. He is President of the Poultry and Egg National Board. To keep his appointments, he flies his own plane. For their numerous contributions to the betterment of agriculture, both Hobart and Russell Creighton were among the first to be elected to membership in the Champion Farmers Association of America.

*Left, Hobart Creighton; right, Russell Creighton*



**OUTCLEANS** **OUTPULLS** **OUTLASTS**  
AND TAKES A "CENTER BITE"

THE FIRESTONE TIRE & RUBBER COMPANY, AKRON, OHIO: Please send me a copy of "Creighton Brothers... Champion Farmers," explaining how they raise White Leghorns.

Name.....

Address.....

City.....State.....

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Entered as second-class matter at Post Office at Cleveland, Ohio, under the Act of March 3, 1879. Additional entry at Mount Morris, Ill.



# New Spray Chemicals Help Growers Cut Production Cost



Growers pack out remarkably clean apple crops when protected from codling moth by Du Pont DEENATE DDT. They also report freedom from scab through use of Du Pont organic fungicide FERMATE, using the product alone or mixed with Du Pont SULFORON-X or with Flotation Sulfur paste.

Many growers have been getting higher yields of fruit but are worried because costs of production have been going up even faster.

New Du Pont sprays and dusts help growers cut these costs and at the same time get even greater yields of clean fruit.

For instance, Du Pont DEENATE DDT has helped many growers reduce their spraying cost for codling moth through control with fewer spray applications. Its excellent control of stings and worm damage results in a greater percentage of No. 1 grade fruit. DEENATE DDT allows foliage to function normally, and so helps produce larger crops of better fruit.

Most fungous diseases of fruits can be controlled with Du Pont FERMATE, an organic fungicide. Users get even better quality because it does not russet fruit. FERMATE controls scab, rust diseases, bitter rot, black rot, brown rot, and cherry leaf spot.

Orchardists find harvest goes faster where poison ivy and poison oak have been killed with an application of Du Pont AMMATE Weed Killer. It also destroys other tough weeds.

For detailed information on these and other Du Pont pest control products, see your local Du Pont technical service representative, or write to the Du Pont Company, Grasselli Chemicals Dept., Wilmington 98, Del.



**DU PONT**

*Pest Control Products*

**INSECTICIDES:** DEENATE\* DDT, GRASSELLI\* Lead Arsenate, NUREXFORM\* Lead Arsenate, LEXONE\* 50 (Hexachlorocyclohexane), LORO\* Contact Insecticide, Calcium Arsenate, Paris Green, ALCOA\*\* Cryolite, BLACK LEAF† 40, Oil Sprays.

**FUNGICIDES:** FERMATE\* and ZERLATE\* Organic Fungicides, COPPER-A Compound, SULFORON\* and SULFORON-X\* Wettable Sulfurs, Bordeaux Mixture.

**OTHER MATERIALS:** 2,4-D WEED KILLER, AMMATE\* Weed Killer, Du Pont Spreader-Sticker.

\* Reg. Trade Mark of E. I. du Pont de Nemours & Co. (Inc.)

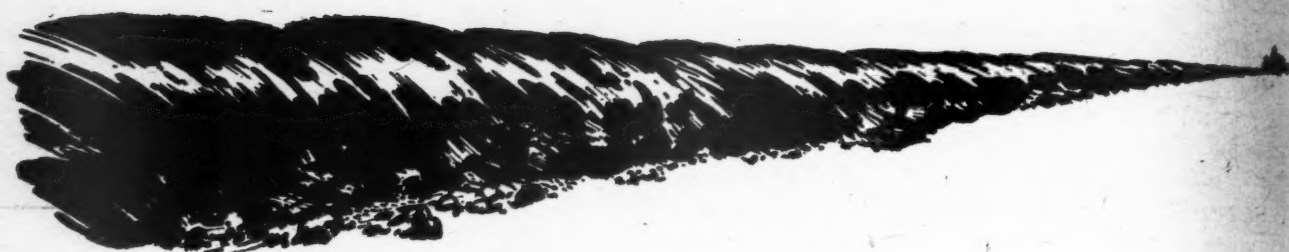
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BETTER THINGS FOR BETTER LIVING  
...THROUGH CHEMISTRY



# A Million Tractors Plowed This Furrow...



## *A Million More Are On The Way*

THERE'S a long, straight furrow across America. It's the furrow plowed by the more than a million tractors that have come out of the Ford Motor Company.

And it will grow longer...much longer... because the Ford Motor Company is expanding for the production of more tractors.

These will be even better than the first million Ford has built.

They will have the solid engineering and sound value that come only from long experience... experience that began with the first Ford Tractor of 1906.

They will be powered correctly to do their work... whatever work they are given.

They will be simple to operate and maintain... and they will continue to put modern

farming methods within reach of the average farmer, with hydraulic implement controls and the right implements.

There is another important point to remember. Ford Service for Ford Tractors will continue to be available throughout America. It will be experienced, economical service, consistent with the quality of the product itself.

And, of course, the Ford Tractors of today and tomorrow will be as thrifty to buy and run as Ford can make them.

To sum it all up, the Ford Motor Company is going on building tractors, and more of them. That's the best indication that Ford will continue to work with the American farmer for more production and better production, at the lowest possible cost.

# FORD MOTOR COMPANY





## Why so many growers prefer PENCO Agricultural Chemicals



Ask any PENCO user why he prefers PENCO agricultural chemicals, and his answer will probably boil down to "Because they really do a job."

But there are other good, hard reasons for PENCO's widespread preference among successful growers. Consider how these advantages of PENCO products would benefit you:

1. Produced "from the ground up" by Pennsalt—a pioneer and leading *basic* producer of agricultural chemicals and the *primary* products for their manufacture or formulation. For you, this means a steady, secure source of supply, *uniform quality*, stable price structure.
2. Thoroughly field-tested at Pennsalt's own regional experiment stations. You know before you buy that each PENCO product will meet your local conditions.
3. Extensive research facilities keep the PENCO line up to the minute, keeping pace with the fast-moving progress of agricultural chemical development including organics.
4. Rigid manufacturing standards provide quality products that give effective pest control. Sprays remain stable in suspension, dusts possess good dustability and adhering qualities.

Plan now to adopt straight PENCO programs from here on in! From the list below, you can pick the product best suited to your individual need. If you desire further information, just write to our Agricultural Chemicals Division office nearest you.

#### DDT

Penco WB-50 Spray Base  
Penco DB-50 Dust Base  
Penco Cattle Spray

#### Benzene Hexachloride

Gamex D-10 dust base (10% gamma isomer)  
Gamex W-10 wettable base (10% gamma isomer)

#### Weed Killers

Penco Sodium Chlorate  
Penco 2,4-D Weed Killers  
Penite (Sodium Arsenite)

#### and many others including:

Kryocide, Calcium Arsenate  
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AGRICULTURAL CHEMICALS DIVISION

**PENNSYLVANIA SALT MANUFACTURING COMPANY**

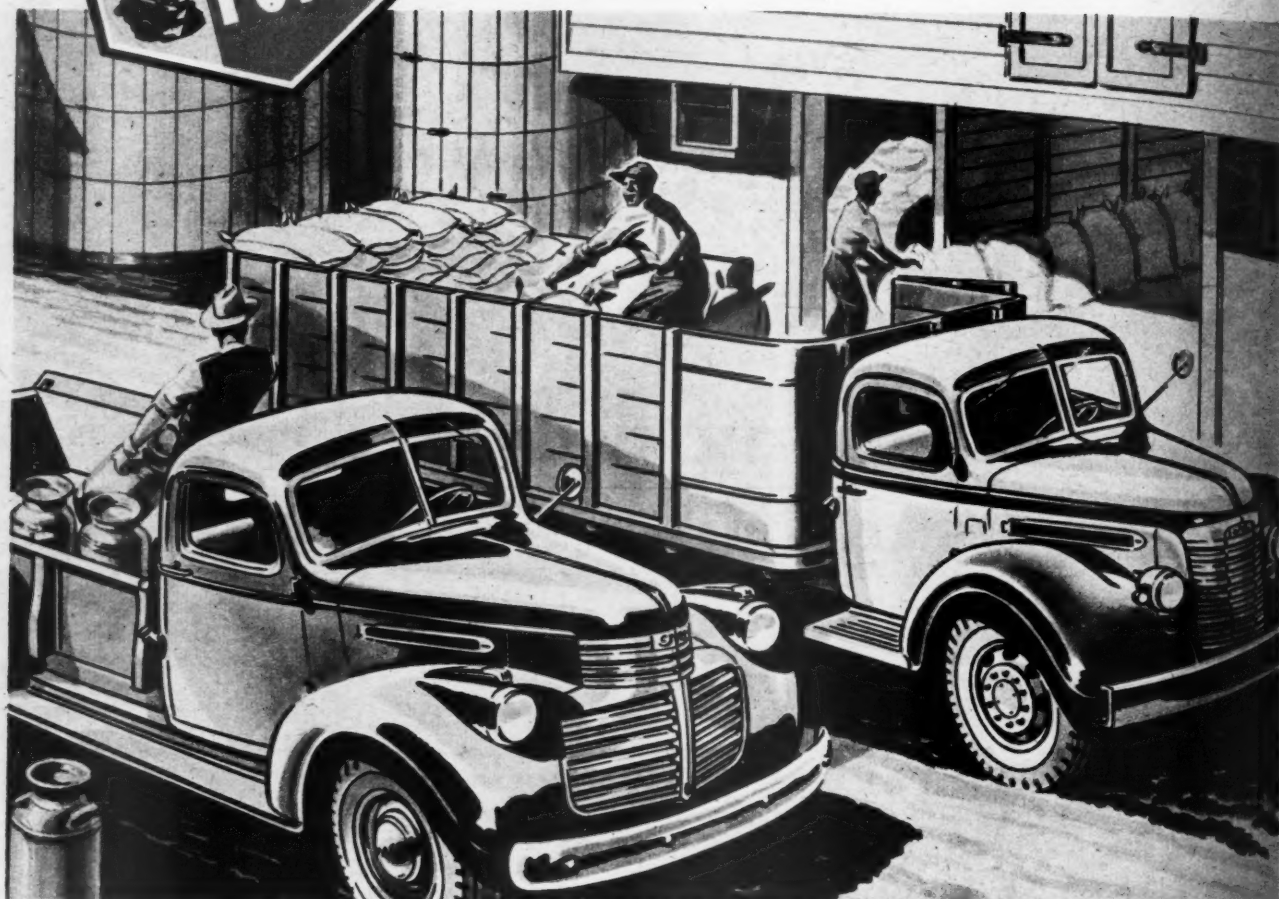
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# FIRST CHOICE OF *Veteran* DRIVERS



GMC trucks are preferred by veteran drivers . . . old and young. They are the choice of men who have operated commercial vehicles for years, just as they are the choice of veteran G.I.s who put GMC military vehicles through unbelievably tough hauling assignments on battlefronts all over the world. GMCs are favorites of these men who know trucks because GMCs can be counted upon to perform powerfully, economically and dependably . . . mile after mile, day after day. They are favorites because they are all-truck built, with truck axles, transmissions, clutches, frames and brakes, plus engines of the same basic design as that used in nearly 600,000 "Army Workhorse" GMCs. There's a model ideally suited to your job . . . to every hauling job, large or small. If you want a truck that can take it, take a tip from veteran drivers. Choose a rugged, war-proved GMC!

**THE TRUCK OF VALUE**

**GASOLINE-DIESEL**

**½ TO 20 TONS**



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AMERICAN FRUIT GROWER



MAY  
VOL. 67

1947  
No. 11

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### AMERICAN FRUIT GROWER

Published Monthly by  
AMERICAN FRUIT GROWER PUBLISHING CO.  
1370 Ontario St., Cleveland 13, Ohio

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Publisher

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#### SUBSCRIPTION RATES

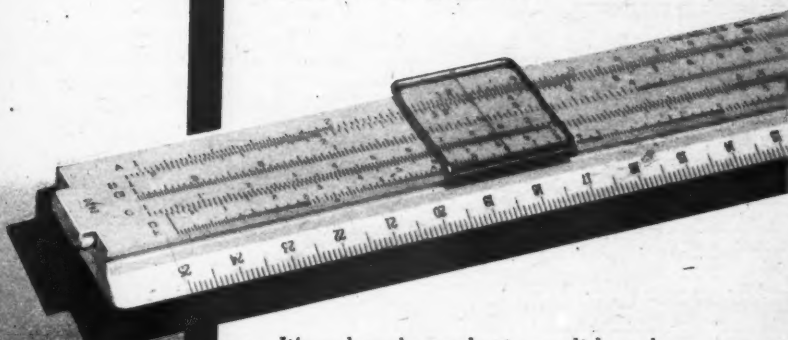
Domestic Except Cleveland, 3 years \$1.00. 1 year 50c. Single copy 10c. Canada, 3 years \$1.00, 1 year 50c. Cleveland and foreign \$1.00 per year.

Entered as second-class matter at Post Office at Cleveland, Ohio, under the Act of March 3, 1879. Additional entry at Mount Morris, Illinois

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## A GOOD THING

WHEN YOU KNOW  
HOW TO USE IT



It's a handy gadget—a slide rule.

In the hands of an engineer, with a shift or two, he quickly gets the approximate answers to many of his problems.

The same slide rule is a mystery to the novice. He may get more wrong answers than right ones when he uses it.

The difference in results lies in knowing how to use it, and how to read the answers.



A DDT spray has a useful place in many a program — apples, pears, grapes, peaches, plums, prunes.

To get the right answers to YOUR problems, ask your pest control "engineer," your ORTHO fieldman, about why and where to use DDT sprays.

## PERSISTO WETTABLE 50% DDT

REG. U.S. PAT. OFF.

... the insecticidal spray compounded to produce long-lasting control of codling moth, thrips, leaf rollers, tussock moth larvae, tent caterpillars, leaf hoppers and Japanese beetles.



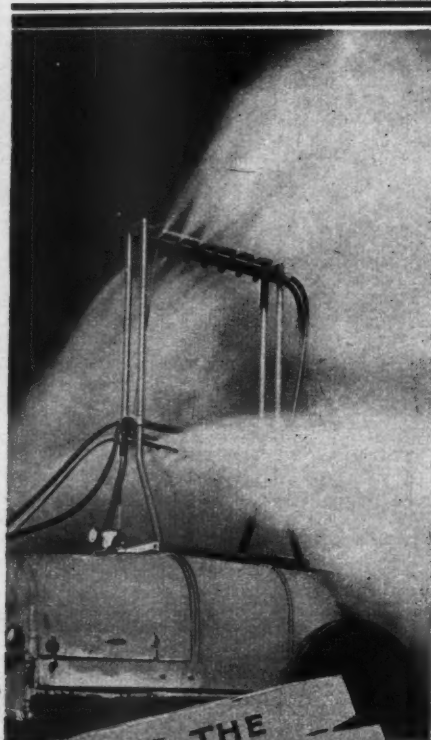
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## AUTOMATIC Spraying Unit



THE AUTOMATIC SPRAYING UNIT APPLIES THE SPRAY BY THE SAME PROVEN MOTION YOU HAVE USED BY HAND AND GROWERS REPORT THAT IT DOES A MORE THOROUGH JOB THAN IS POSSIBLE BY HAND OPERATED GUNS.

THIS STURDILY BUILT UNIT HAS CONTROLS AT THE DRIVER'S FINGER TIPS, ENABLING HIM TO TURN ON THE ENTIRE UNIT, ONE SIDE, OR THE LOWER BARS OF NOZZLES.

IT CONVERTS YOUR PRESENT SPRAYER TO A MODERN ONE MAN MACHINE WHICH PAYS FOR ITSELF IN 12 TO 15 DAYS.

THIS IS THE THIRD YEAR FOR THE AUTOMATIC SPRAYING UNIT, AND WE HAVE DEALERS THROUGHOUT U. S. AND CANADA.

**See It, Try It, and You'll Buy It**

See Your Dealer or Write to

**Grand Traverse  
Orchard Supply Co. Inc.**

Traverse City, Michigan

## LETTERS TO THE EDITOR

### Reader Lauds Spray Trade Name Suggestion

Gentlemen:

It was worthwhile suggesting to manufacturers of spray and dusting materials that there is a limit to the use of new names in marketing their products. The system of code numbers you have designated to identify such preparations shows a high quality of leadership.

Your suggestions are plain, simple, and practical and should set in motion a series of reforms. Experience teaches that it is hard to effect reforms, and such stimuli as your article should insure their success.

New York, N.Y.

E. D. Cuevas

### Let the Bumblebee Bel

Gentlemen:

Since the fruit grower and beekeeper have much in common, and since bee men are more or less fruit minded, it would seem profitable to both to cultivate as much harmony and understanding between them as possible.

In this era of highly toxic insecticides, when bee men are suffering unprecedented losses, every effort should be made to educate the fruit grower as to just how and when to handle his spray work so as to minimize, as much as possible, the beekeeper's loss. Bees are the fruit growers' best pollinizers, and loss of them is decidedly as great to him as it is to the beekeeper, farmer, and seed grower.

For every dollar that bees make for the beekeeper, they make ten dollars for other people. This makes it a good many people's business, doesn't it? Particularly the fruit growers!

It seems to me that an interchange of information between your publication and the outstanding bee journals would produce no end of good results for everyone.

Malcolm, Iowa

E. R. Taylor

*Yes, the effect of toxic sprays on bees is a real and serious problem. The New York Horticultural Society, meeting with the Empire State Honey Producers, discussed the problem last November, as a result of which the New York Extension Service recommends that lead arsenate be omitted from the spray schedule before bloom.*

*If cooperation between the fruit growers and beekeepers is continued in the way shown by the New York Society, results should be profitable to both.—Ed.*

### Wanted—An Orchard

Dear Editor:

I must, in the near future, give up my work as a minister because I have lost sight in one eye and must save the other one. I must try to do something outdoors away from books, reading, clerical work, and hard study.

All my life I have been interested in fruit, and I wonder if I could find a well-established orchard that is not too big, where I can make a reasonable living and be out of doors. I would be particularly interested in something in south-eastern Pennsylvania.

*We have omitted the name and address of this reader, but the AMERICAN FRUIT GROWER will be glad to communicate to him any information our readers may have concerning such an orchard.—Ed.*

### Furniture from Firewood?

Dear Sirs:

I have about seven acres of apple trees which I want to take out. I have been told that apple wood is scarce and that it is worth more than for just firewood. I would be glad to hear from anyone interested in obtaining this wood.

Akron, Pa.

Paul L. Lepole

*Apple wood is a beautifully grained wood, and is valuable for cabinet working if it is possible to get it in sufficient length for economical sawing. It is, indeed, a shame to have it used for firewood.—Ed.*

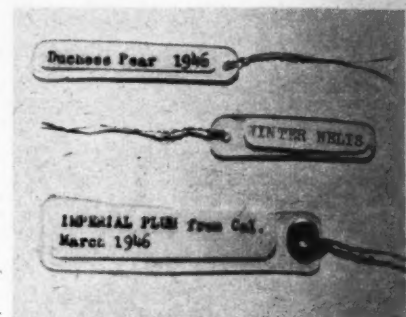
### Weather-Proof Name Tags

Dear Sirs:

Enclosed are two samples of tags that I am using on my fruit trees. I have been grafting and budding for the last six years, and have found that writing on wooden tags weathered away before the wood came into bearing. Now I laminate the labels between sheets of transparent plastic, which makes them water, fire, and weather-proof. Some of the tags are made with two slits on one end through which to pull the other end to form a band.

Toledo, Ohio

Carl H. Moen



*We have photographed some of Reader Moen's tags (above) to give a better idea of their appearance.—Ed.*

### Courageous Lady!

Dear Sirs:

My neighbors are not fruit growers, and I would like to supply them with peaches. They drive 20 miles to an orchard to get good tree-ripened fruit.

I have been reading AMERICAN FRUIT GROWER, Purdue Bulletins, and catalogues, etc., and have decided that we have a good location. I have ordered 25 each of Rochester and South Haven peaches, and I intend to do, myself, as much of the work of planting and caring for them as I can. We have a 68-acre farm, and my husband will have some time to help me, but it is my adventure, chiefly.

It would be a pleasure to know some other woman who has tried, or is wanting to try such a stunt. Probably neither of us will have much time for writing letters, but I will need inspiration, and perhaps I can give it, too.

How about it, would you encourage me, or is it too much heavy work for a woman who isn't made of iron?

New Castle, Ind.

Mrs. Marie Noble

*There's a great deal of work to fruit growing, but if Mrs. Noble's husband will help her, and if she has some spraying equipment, we believe she can do it. We wish Mrs. Noble the best of luck in her "adventure".—Ed.*

AMERICAN FRUIT GROWER



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## GOOD MANAGEMENT and... GESAROL AK 50 The perfect team for greater PROFITS

MR. FRUIT GROWER: See your Geigy Dealer. Get **GESAROL\* AK 50**. Supplement your own skill and knowledge with this tried-and-proven composition developed by the "Originators of DDT Insecticides". Science offers no surer way to increase cash returns than through the effective control of many major insect pests.

Experience proves that **GESAROL AK 50** gives amazing results in the control of Codling Moth on apples and pears, and in the control of Oriental Fruit Moth on peaches.

The Geigy Company offers you a special Folder giving carefully developed recommendations for the proper application of **GESAROL AK 50** and other **GESAROL DDT** compositions on fruits, berries and nuts. This Folder is **FREE** on request. Supplementing this, it is also desirable to consult your county agent for local spray and dust schedules.

If you find **GESAROL AK 50** not available locally, simply send us the name and address of your dealer.

\*Reg. U. S. Pat. Off.

**GEIGY COMPANY, INC.**  
89 Barclay Street, New York 8, N.Y.

**Geigy**



ORIGINATORS OF  
**DDT**  
INSECTICIDES



**You can count on it for the  
FULLEST measure of BIG-CAR reliability  
at LOWEST cost**



That's why so many farm owners everywhere are again making Chevrolet their preferred car—for Big-Car performance and dependability—for Big-Car beauty and comfort—for thoroughgoing Big-Car quality at lowest prices and at low cost for gas, oil and upkeep!

Yes, you can count on this newest Chevrolet for the maximum degree of that most prized of all motor car qualities—*Big-Car reliability at lowest cost.*

You'll find it performs as you want it to perform, day in and day out, over a long period, for it has the built-in quality and endurance to give you and your family years of complete motoring satisfaction, years of complete motoring enjoyment.

And in addition to the Big-Car performance and dependability of its sturdy Valve-in-Head Thrift-Master Engine, it brings you the Big-Car beauty of a Body by Fisher, the Big-Car comfort of the Unitized Knee-Action Ride, the Big-Car safety of Positive-Action Hydraulic Brakes—a combination of features not found in any other car in its price range.

Moreover, you save money when you buy one of these bigger-looking, better-looking Chevrolets—*lowest-priced line in the Chevrolet field*—and extremely economical to operate as well.

That's why we say, choose the car which so many other farm owners are choosing—the newest Chevrolet—for **BIG-CAR QUALITY AT LOWEST COST.**

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT 2, MICHIGAN

*The Newest* **CHEVROLET**

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**O**UR fruit ranch is located in Orondo, Washington, twenty-three miles north of Wenatchee on the east bank of the Columbia river. My brother, Robert, and I cleared the land and planted the first trees in the spring of 1928. We started with only enough capital to make a down payment on the land and nursery stock. During the first few years we worked for nearby ranchers and took care of our orchard before and after regular work hours.

Inasmuch as we had no buildings on our ranch we soon had some first-hand experience in housing accommodations, as we had to live in whatever was available on other farms. Plumbing and facilities for showers and laundry were practically unknown for ranch workers in those days. Generally speaking, worker accommodations consisted of unsealed cabins where the rigors of life were much too severe for most women and children. Consequently, most of the ranch labor was single men with the large ranches operating cook houses and bunk houses. Since that time there has been considerable change, with more of the single men being attracted to towns and cities, while families are either being forced out of towns or are being attracted to the country. This trend is even very noticeable in transient, or harvest, labor.

Today, with present demands for more skilled workers, and the advantage of having workers who will stay long enough to be familiar with the ranch operations, good housing is a must. We have on our ranch a comfortable, modern home of from four to six rooms for each of our year-around employees. Depending on size and the time built, the houses cost from three thousand to forty-five hundred dollars to build. Homes can be built more cheaply on ranches if they are built at a time when ranch work is slack and the regular crew is used for most of the labor. Some of these homes are furnished complete with

## HOME ATMOSPHERE HOLDS OUR WORKERS

*Washington Brothers Provide Comfort  
and Security for Orchard Families*

By GRADY AUVIL

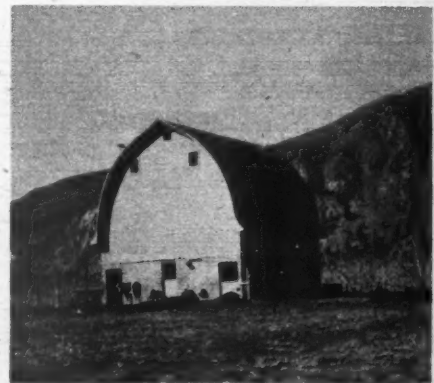
furniture and electric stoves, hot water, refrigerators and washing machines. Repairs and replacement of furnishings are supplied by the tenant, and building repairs are done by the management.

To complete our home building, we constructed a frozen food plant and 30° room for home storage. This is used by both owners and employees for frozen storage, each family having thirty cubic feet of frozen food lockers. The 30° room is used for all to store fresh milk, cream, fruits and potatoes which are usually on hand in ample supply. Cost of this building was about \$3500.

Production-for-use, as a ranch program, has been in practice for five

years. For this program we have three acres of irrigated pasture, seven acres of alfalfa and two acres of truck garden and berries. The pasture and alfalfa produces all the feed except grain for our five milch cows, and for

*(Continued on page 30)*



Workers are supplied with food and dairy products from the grower's own farm.



Cottages equipped with modern electrical appliances are provided for workers.



Left—Well-shaded, this tile home provides comfortable living for two families.

Below—This barracks type building includes a kitchen and a dining room.



# ATTRACT ORCHARD WORKERS With Better Housing

By H. P. GASTON

**H**UNDREDS of thousands of farm workers, who once helped to grow and harvest the nation's crops, moved into towns during the war years. They became accustomed to living in cities, and drawing industrial wages. Many of them will never return to the land. Consequently there isn't enough farm help to go around, and the shortage is likely to continue for some time. The workers who remain tend to seek employment on those farms where good housing is available. Employers who neglect their housing program are likely to find it difficult or impossible to secure the help they need. Most growers find that it costs less to provide good living quarters than it does to go without good help. A brief discussion of several basic types of housing may enable you to decide on the kind that will serve you best.

The small, one-room cottage is the simplest form of farm-worker housing. It is, at the same time, one of the most practical and widely used forms. It can be used for sleeping quarters only, or, if occasion demands, it will also serve as kitchen and dining room. A single unit will house from two to ten hands, depending on its size.

One of the most popular single-room units is the 12' x 16' cottage type. Such structures will accommo-

date up to five people in reasonable comfort. The furniture usually consists of a double-deck bunk (accommodates four) a single cot, table, stove, ice box, chest-of-drawers and three or more chairs.

The per-worker cost of single-room cottages is somewhat higher than that of housing of the apartment or barrack type, but most producers feel that its advantages outweigh its disadvantages.

Housing units of the multiple-room type are particularly well suited to the

needs of growers who hire family groups and employ 25 or more workers for a relatively long season. If you are such a grower, a multiple-room unit may be the most practical answer to the housing problem on your farm. A single building that will house several family groups under one roof can be constructed for considerably less than it will cost to build enough one-room units to house the same number of families.

Barracks are a specialized type of building designed to meet the housing needs of one particular class of workers. Those ordinarily housed in barracks are usually both unwilling and unprepared to get their own meals. This means that a kitchen and dining-room must be included in the building, and meal service provided.

A building of the barracks type represents a considerable investment. It may pay you to employ a good architect to help you draw plans and write specifications. Bids can then be



Comfortable homes can be built inexpensively by converting farm utility buildings.



secured from several contractors and the job "let" on the basis of the bids received.

### Dual-Purpose Buildings

Practically any well-constructed farm building of adequate size, that can be cleared of other equipment, may be temporarily converted into housing. Buildings of this sort appeal particularly to growers who, for one reason or another, feel that it would not be good business for them to invest in units that are used for housing only.

To change an existing building, designed for other uses, into a practical housing unit may involve more or less extensive modifications. It should be borne in mind, however, that once the necessary fundamental changes have been made, conversion in subsequent years becomes relatively simple.

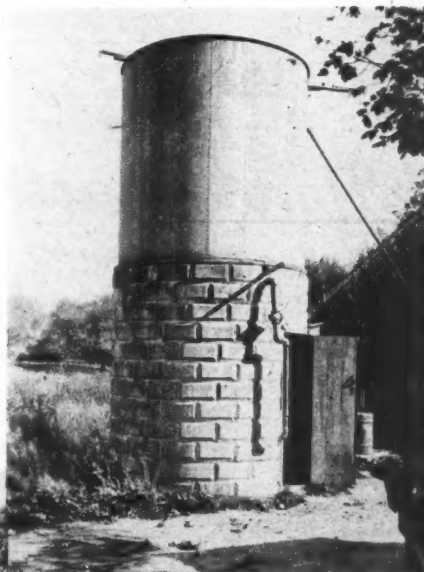
In checking the possibilities of your farm buildings, go over each in turn. You may find that there is at least one that can be spared when needed for housing, and converted without great expense.

Growers who employ transient help for only a short season sometimes feel that they cannot afford to invest in any sort of permanent structures in-

quartered hands do more work and require less supervision. This means that money spent for better housing pays big dividends in dollars and cents, to say nothing of saving the grower trouble and expense. The first cost should be spread over the useful life of the structure.

Costs need not be excessive. There are many ways in which they can be kept down. Some growers save by using lumber sawed from home-grown timber. Others use locally grown poles

One grower utilized waste space by constructing a shower under his water tank.



Workers prefer housing that is located close to the job. The site should be shady and inviting. It should afford some privacy. Because of noise and dust, locations close to heavily travelled roads should be avoided.

Growers prefer a location that is reasonably close to the farmstead, and at the same time fire-safe. Well-drained land is desirable.

It is unlikely that any one location will be ideal. The final choice should not be made until the worker and owner preferences, and any other problems peculiar to your particular farm, have received careful consideration.

Under the heading of conveniences should come the things that make living in a temporary home easier and more pleasant.

SCREENS that keep out flies, mosquitoes and other insects make seasonal hands more comfortable, and help prevent the spread of disease. Workers of the better class are sure to insist on screens.

SHELVES and cupboards. All farm workers like to have a place for their luggage, clothes and other personal belongings.

LIGHTS. Most of the better farm  
(Continued on page 31)



The privacy of individual apartments is provided in this building.

tended for housing. In such cases tent housing may provide a satisfactory substitute.

Tent housing must be supplemented. It is seldom, if ever, satisfactory for the help to cook and eat in the open. A prolonged rain makes it impossible for them to prepare hot food. Some growers solve the food problem by clearing a garage or other suitable building, installing food preparing and serving equipment, and providing meal service. Other growers furnish shelter and equipment which makes it possible for workers and the members of their families to prepare and serve their own meals.

Money spent for housing should be considered an investment, not an expense. Better housing almost invariably attracts better help, and means a more effective crew. Comfortably



Portable one-room units are often an advantage on large orchards.

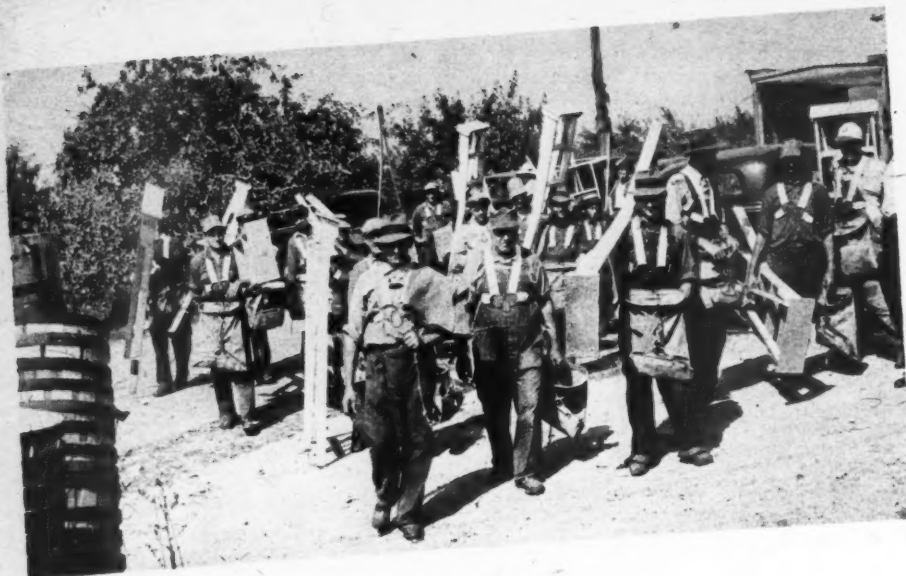
for rafters and beams. In many cases at least a part of the work can be done by the owner and his regular help, during slack periods. Local builders are usually able to suggest practical ways of saving both time and money.



The addition of a kitchen and dining room to an old barn made quarters for 25 men.



Workers prefer a shady location near the orchard.



## WHO'LL Pick Your Fruit?

Head of USDA's Farm Labor Program  
Analyses the Help Situation . . .

By MEREDITH C. WILSON

United States Department of Agriculture

**A**ERICAN farmers are once more called upon to maintain essentially maximum agricultural production at the record level of war years in order to care for our own food and fibre requirements and to help meet the shortages of other nations. Emphasis is again on crops like sugar beets that continue to require large amounts of hand labor. The need for labor to assure this high level production will be about as great this year as in any of the past several years. The labor supply situation in 1947 is likely to be at about the 1943 level, but somewhat better than the low point reached in the autumn of 1945.

Current USDA reports indicate the domestic farm labor supply a little larger than a year ago. As of March 1, the number of families and

## 1946 PEACH HARVEST MAP

*Where you are put -* RELIABLE INFORMATION ABOUT WORK & CAMPS

WORKING OFFICES OF THE COUNTY AGENTS IN THE VIRGINIA PEACH COUNTIES. YOU CAN OBTAIN WITH OUT COST, FULL AND RELIABLE INFORMATION ABOUT WHERE WORKERS ARE NEEDED AND WHERE LABOR CAMPS ARE LOCATED.

The names of the county agents and their office locations are as follows:

COUNTY	AGENT	OFFICE
Bedford	John S. Smith	Bedford
Boston	A. H. Smith	Boston
Warren	John B. Whitfield	Warrenton
Spotsylvania	T. D. Scott	Spotsylvania
Stafford	Fred H. Hanger	Stafford
Stafford	John C. Miller	Stafford
Stafford	E. H. Smith	Stafford
Stafford	D. B. Matthews	Stafford
Stafford	R. H. Smith	Stafford

THERE ARE CAMPS IN ROANOKE, BOYD, AND NELSON AND ROCKINGHAM COUNTIES.

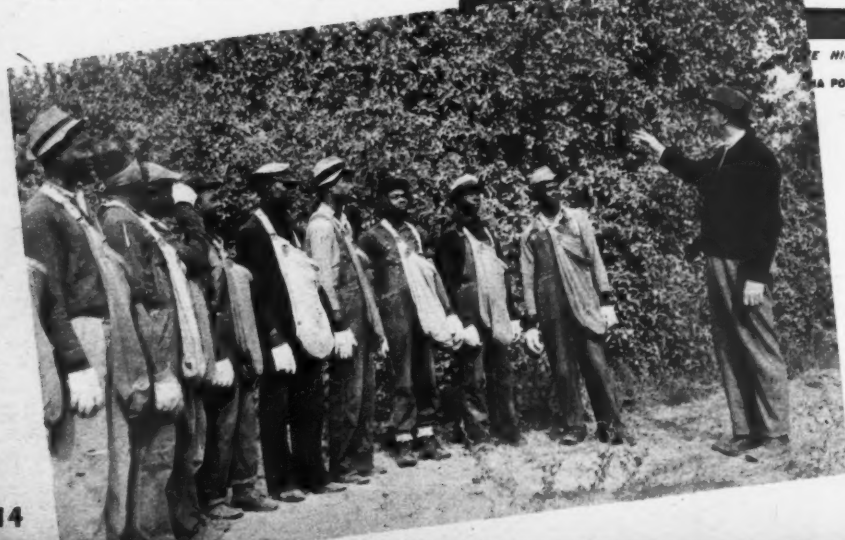
**WORKERS WANTED JULY 25 to AUGUST 25**  
THE PEACH HARVEST WILL START IN MONTGOMERY ABOUT JULY 25, AND IN THE OTHER COUNTIES ABOUT AUGUST 1 AND WILL CONTINUE ABOUT THREE WEEKS.



HIGHWAYS AREAS WHERE PEACH PICKERS ARE NEEDED  
POLYTECHNIC INSTITUTE AND U.S. DEPARTMENT OF AGRICULTURE COOPERATION

Above—Publicity drives helped recruit pickers for the Eastern fruit areas last year. Maps like this one directed workers to areas where they were needed.

Left—Jamaican workers receive picking instructions. Nearly 50,000 of these workers will be needed in the United States this year.





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MAP

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Pleasant surroundings make happy workers.



Young pickers enjoy a hearty meal after a hard day's work.

# PICKING FRUIT IS FUN WHEN GROWERS PROVIDE RECREATION



Wash-up time is fun time when there's a lake nearby for bathing.



Sprucing up for his best girl, this boy enjoys a summer in the orchard.



A day's work done, pickers look forward to a good meal and an evening's relaxation.



Simple pleasures are the best. Here workers are enjoying a game of horseshoes.

# NATIONWIDE FRUITS

## CHERRIES

● **Leaf spot**, the cherry grower's worst enemy, begins as a reddish or purplish spot, which later turns brown, and may drop out, leaving the leaf perforated, and giving rise to the name "shot-hole disease." In later stages, the leaves turn yellow, and the disease is often known as "yellows" or "yellow leaf" at this time.

As a result of the loss of vitality suffered with the loss of leaves, the fruit fails to mature. Repeated severe attacks may kill the tree. The cherry tree—though seldom susceptible to winter injury as a healthy specimen—will often suffer greatly after a bad year of leaf spot. Trees may even be winter-killed at such a time.

The New York station recommends insoluble coppers this year for control of leaf spot, with Fermate or Karbam substituted when copper injury may occur. The Illinois station recommends a ground spray of Elgetol early in the spring, before the buds begin to open, followed by two cover sprays consisting of lead arsenate, copper sulfate, hydrated lime and summer oil. The first cover is to be put on immediately after the shucks have fallen, and the second cover ten days later. The spray will also protect against brown rot, curculio and slug.

An additional cover, immediately after harvest, is recommended for leaf spot. This spray should consist of copper sulfate, hydrated lime and summer oil.

Compound 341, a new and highly recommended protective spray material for leaf spot, was announced for combatting leaf spot in the November, 1946 issue of *AMERICAN FRUIT GROWER*. Tested by Dr. R. H. Wellman of Boyce Thompson Institute and Dr. H. W. Thurston of Pennsylvania State College in five years of extensive laboratory and field research, the compound, although announced last year, is not yet available in commercial amounts.

● **A cooperative** project to fight obscure diseases which take an estimated annual toll of \$6,000,000 in the \$230,000,000 stone fruits industry has been

undertaken jointly by business and governmental groups.

Michigan, New York, Washington, Oregon and Minnesota have already started a system of budwood inspection and certification in cooperation with nurserymen.

Nurserymen, jointly with state Department of Agriculture officials and experiment station officials, select disease free trees during the crop season, from which buds are chosen for testing at experiment stations. Buds which prove disease-free are then grown in isolated conditions, being constantly checked for disease and destroyed if infected. Eventually every producer of budwood is expected to have a source of disease-free budwood available to him and will be able to supply commercial orchardists with disease-free stock.

## FIGS

● **The fig is** really a mistake—on the part of the wasp. For although the Smyrna fig tree gets the credit for producing a delectable sugary fruit, we know it could not produce anything without the aid of the wasp and the caprifig tree, which bears a wild inedible fruit.

Tiny fig wasps find the inside of these wild figs cozy breeding places, and all would be well for them if they would stick to their familiar haunts. But the young generation, emerging from its pupa state, sets off on new adventures.

A neighboring Smyrna fig tree in bloom is a treacherous pitfall to young wasps leaving home. It seems almost familiar, with a tantalizing hint of something strangely alluring. The

(Continued on page 41)

AMERICAN FRUIT GROWER





the length of the terrace let the water run off gradually, permitting more to soak into the soil and causing little, or no, erosion. At frequent intervals there were openings in the terrace where the run-off could be delivered into sodded waterways and carried away. Once sodded, these waterways would never be cultivated or torn up, since such practice would cause serious gully erosion.

The trees were planted on the exact tops of the terrace ridges. This gave them a spacing of from 22 to 25 feet, or roughly about 75 trees per acre.

In the past, Street's peach plantings had suffered from nitrate deficiencies during the early growing period, especially during wet seasons. To overcome this, he applied a pound of nitrate fertilizer (ammonium nitrate) per tree for each 3 inches of rainfall until mid-summer, when the practice

was stopped. This gave excellent results and prevented excessive dropping of immature fruits during the early growing periods, especially at pit forming time. It remains to be seen what effect the terracing will have upon this phase of his peach culture.

The varieties Street selected for the new planting were 1,250 Shipper's Late Red (Beyers strain, Hale type), 750 Shipper's Late Red (Yates strain, Elberta type), and 250 Red Haven. The older plantings lean heavily to Elberta. He is attempting to spread his varieties a little in order to harvest a greater quantity of peaches with the same amount of labor. By growing varieties which ripen over a longer period, he is able to partly accomplish this, especially since several high quality shipping peaches are now appearing for periods before and after Elberta.

## APPLES

● **Commercial apple** production for the past decade has averaged a little less than 125 million bushels a year, with approximately 60 per cent produced in eastern orchards located near large centers of population and the remaining 40 per cent grown in the west in a few areas where conditions are particularly favorable, said Dr. J. R. Magness of the USDA in a recent address.

Fifty years ago the worth of a variety was determined by how well it would keep in common or basement storage, but today, with the apple crop used either as fresh fruit or as one of the various processed products, varieties that are planted are generally of high dessert quality.

Further changes in the apple in-

dustry today show that with the necessity for intensive spray programs, the farm orchard has largely disappeared. The industry is now largely in the hands of specialists and centered in areas where production conditions are favorable.

● **Controlled atmosphere storage** is made available to the home grower by a method introduced by Prof. James G. Francis of North Carolina State College.

In controlled atmosphere storage, the amount of oxygen available to the fruit for respiration is reduced by allowing the carbon dioxide produced in normal respiration to accumulate.

Fresh air is introduced from time  
(Continued from page 41)

## PEACHES

● **Something new** in peach planting was tried in the fall of 1946 by Frank Street, Manager of Kentucky Cardinal Farms, near Henderson, Ky. He already had conventional peach plantings on his 3,450 acre farm, but his new orchard, set on 40 acres of hill land, would be different. After seeing huge terraced and contour-planted peach orchards in South Carolina, Street was so impressed with their success, that he decided to make his next orchard a terraced one.

The terraces were made, and the 40 acres of trees were set, in about six weeks. The terracing was done with a road grader, and the job cost about \$35.00 an acre. The terraces were spaced from 20 to 25 feet apart, each having a fall of 6 inches to every 100 feet. This gentle slope through

Variety	Total No. of Trees and Acres			Non-Bearing Trees		Bearing Trees						
	Num-ber	% of Grand Total	Acres	1-9 yrs. 1936-1944	%	10-19 yrs. 1935-1946	%	20-29 yrs. 1925-1946	%	30 yrs. and older prior to 1915	%	Yield 1944
Spy	50143	23.0	2816	9131	18.2	16026	31.1	13935	27.0	11051	22.0	200623
Jonathan	42912	20.0	1478	27761	65.0	8565	20.0	5277	13.0	1309	3.0	44990
Delicious	38433	17.6	1368	22507	59.0	9562	25.0	5817	15.2	547	1.4	75126
McIntosh	33757	15.4	1202	13648	42.0	11185	33.0	7900	24.0	1024	3.0	143694
Baldwin	12217	5.6	459	2007	16.4	962	7.8	3006	25.5	6242	51.0	39156
Early	14270	6.5	519	2174	15.2	3539	24.7	5155	36.0	3402	24.0	53396
Late	26156	12.0	931	7742	30.0	6962	26.6	7146	27.0	4306	16.4	134107
Totals	217888	100.0	8773	84870	38.8	56801	26.6	48236	22.0	27881	12.7	691092
Rochester and Earlier	18006	9.3	399	15679	87.0	2327	13.0					
Between Rochester and Hale Haven	65285	34.0	1338	58446	89.0	6839	11.0					
After Hale Haven	108612	57.0	2326	87931	81.0	20681	19.0					
Pears	23110		491	10245	44.0	4192	18.0	2888	12.0	5785	25.0	14437
Plums	20373		392	13094	64.0	5782	33.0	1407	3.0	90	0	10964
Cherries	29491		599	15371	52.0	9953	33.0	2354	8.0	1813	7.0	1377435 pounds

How to get accurate information on fruit tree plantings to predict variety trends has always been a perplexing question. Here's how Directors of the Kent-Ottawa (Mich.) Horticultural Society solved the problem. Over 95 per cent of the growers in Kent and surrounding counties cooperated in filling in questionnaires, information from which was tabulated in the chart shown above. Work was done by the Kent County Extension office and the Graham Horticultural Experiment Station.



## • Topsy-Turvy Weather Puts East Behind, West Ahead • Scab And Red Mite Threaten

**ARKANSAS, April 23**—Peach crop safe, although some areas still in danger from late frost. Apple crop in northwest Arkansas shows fairly good prospects. Considerable loss of peach trees in Nashville area due to winter injury. Good grape crop in prospect in northwest Arkansas. Rainfall light, spraying according to schedule.—*Earl J. Allen, Sec'y, Ark. State Hort. Soc., Fayetteville.*

**CONNECTICUT, April 21**—Winter and spring weather favorable. Total rainfall normal. Fruit buds indicate good bloom for 1947. Scab carry-over heavy, but growers ready for spraying despite shortages of some fungicides and insecticides. Several growers have new large volume spray rigs.—*Arthur C. Bobb, Extension Fruit Specialist, Storrs.*

**GEORGIA, April 21**—Peach outlook especially good at this point. Winter killing of fruit buds under 15 per cent. Bloom three weeks later than normal. Usual spread in harvest between South and Central Georgia not expected because bloom period varied by one day only. If plum curculio and oriental fruit moth can be controlled, heavy crop may be expected.—*E. F. Savage, Ga. Agr. Exp. Station, Experiment.*

**IDAHO, April 21**—Fruit crop prospects are promising with little damage from freezing in commercial sections. Prunes and peaches were heavy; cherries lighter than 1946. Apples, in full bloom now, look normal. Threatening weather last three weeks necessitated heating. Fruit is considerably ahead of normal.—*A. Harold Davidson, Sec'y, Idaho State Hort. Soc., Nampa.*

**ILLINOIS, April 23**—Fruit prospects good in western Illinois, except peaches which were caught in January with 10 to 14 degree below zero cold wave. Cherries, pears, apples promise fair bloom, a month later than last year. Prospects one-half

to two-thirds last year's crop.—*C. C. Mast, Sec'y, Ill. State Hort. Soc., Quincy.*

**INDIANA, April 23**—Peach bloom expected month later than 1946. Southern state Elbertas in bloom April 22. No frost damage to peaches or apples. Moisture situation improved. Knox County has large numbers red-banded leafroller. Prospects for larger crop than 1946 in all but northern tier of counties. No winter injury reported.—*Ben B. Sproat, Sec'y, Ind. Hort. Soc., Lafayette.*

**IOWA, April 21**—Apple buds still dormant. Gooseberry leaves only ½ inch. Black raspberry buds just breaking. Danger of early scab infection. Most peach buds killed. Light apple crop expected. Good set in well-kept apple orchards. In west state, trees planted after 1940 Armistice Day storm will start bearing with light crop.—*H. E. Nichols, Asst. Ext. Hort., Ames.*

**KENTUCKY, April 23**—Prospects bright for 1947 crop. Season late, no injury. First shipment Blakemore strawberries expected about May 15. New plantings strawberries off 1/3 due to rainy season. Heavy bloom in peaches. Farm labor scarce and high.—*W. W. Magill, Sec'y, Ky. State Hort. Soc., Lexington.*

**MAINE, April 21**—Better than average crop expected, good bloom, all varieties. Growers warned of oyster shell scale, red mite and scab. Scale localized, red mite serious problem in all orchards. York County nears delayed dormant, northern counties still dormant. Heavy carry-over of scab spores. Warning: don't be too anxious to economize on spray costs this year! Spray often and thoroughly through first cover, save in summer.—*Rockwood N. Berry, Sec'y, Me. State Pomological Soc., Livermore Falls.*

**MARYLAND, April 21**—March snows and windy days made dormant spraying

difficult. Season opened suddenly although bloom two weeks behind 1946. Peach bloom heavy, apple bloom scattered and spotty. Apple scab spores ready for discharge. General opinion days of high prices and uncertain fruit gone and consumer will look for quality at conservative prices.—*A. H. Vielheller, Sec'y, Md. State Hort. Soc., College Park.*

**MASSACHUSETTS, April 21**—No severe cold last winter; should be no injury to wood and peach buds are in good shape. Fruit buds swelling, no color yet. Apple bloom promises to be good, but not equal to heavy bloom last year. Raspberry canes show some spur blight. Scab spores are now well advanced and ready to fly.—*J. K. Shaw, Mass. State College, Amherst.*

**MICHIGAN, April 22**—Not over 25 per cent of dormant spray has been applied. Excessive moisture in soil has kept growers from orchard. Will be plenty of peaches, and apples look like a good crop. However, some feel last year's drought will affect apple crop more than expected. Season in all farm work better than two weeks late.—*K. K. Vining, Grand Rapids, Mich.*

**MINNESOTA, April 20**—Season two to three weeks late, apple buds still dormant which minimizes danger from late spring frost. Prospects for heavy bloom; trees are in excellent condition. Crop prospects good for all fruits.—*J. D. Winter, Sec'y, Minn. Fruit Grower's Ass'n, Mound.*

**MONTANA, April 18**—Apple and cherry prospects look excellent. Cherry trees in excellent condition, bloom to start within ten days. Should exceed last year's crop by 20 to 25 per cent. Apple trees in excellent condition and spurs indicate heavy bloom.—*George L. Knight, Sec'y, Mont. State Hort. Soc., Missoula.*

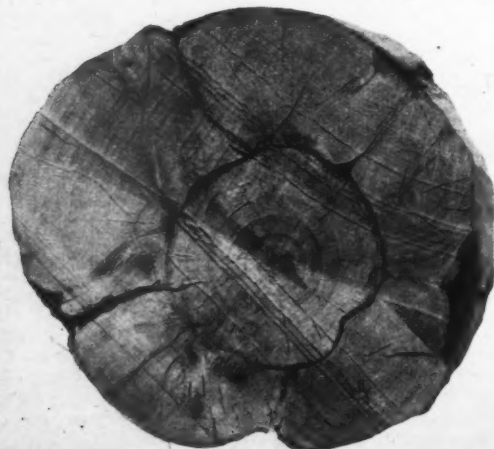
**NEW HAMPSHIRE, April 18**—Weather conditions normal. Buds indicate good crop, all leading varieties, with about 50 per cent of crop McIntosh. Orchards poorly sprayed and fertilized during short-crop years make poor showing.—*D. R. Batchelder, Sec'y, N.H. Hort. Soc., Wilton.*

**NEW JERSEY, April 21**—Blossom development about normal this year. Peach trees bloomed April 20, about two weeks later than 1946. Peach prospects indicate 1,225,000 bushels, slightly above 1946. But such an early estimate is subject to change. Judging from bloom prospects, commercial apple crop will be larger than anticipated earlier. But since bloom on some trees will come from small fruit buds, set may be lighter than expected.—*Arthur J. Farley, Sec'y, N. J. State Hort. Soc., New Brunswick.*

**NEW YORK, April 24**—Season one to two weeks late. Buds showing green this week. Temperature normal. Dinitro applied by most growers, oil in green tip or delayed dormant next on schedule. Difficult to obtain superior type oils recommended this year. Average or slightly larger crop expected.—*T. E. LaMant, Sec'y, N. Y. State Hort. Soc., Albion.*

(Continued on page 34)

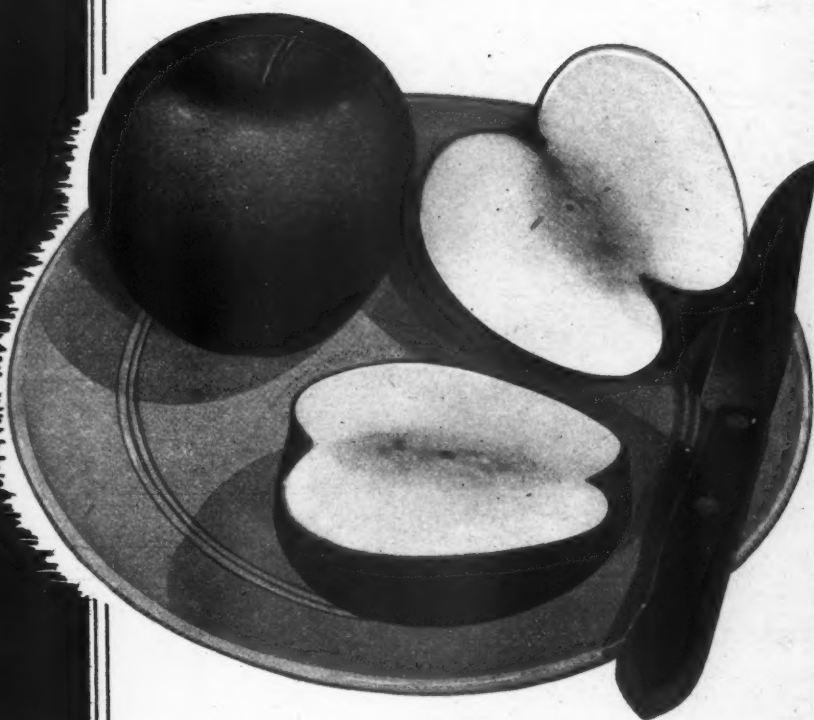
## HOW GOOD A HORTICULTURIST ARE YOU?



This is a cross-section from the trunk of a 15-year-old apple tree recently cut down in the Mantle Orchards, Painesville, Ohio. Just as you determine a tree's age by the number of growth rings, so you can tell of any unusual occurrence in the life of the tree. What happened to this tree? (Answer is on page 39.)



# FOR MORE TOP GRADE FRUIT



## Protect Your Orchards With Black Leaf Products

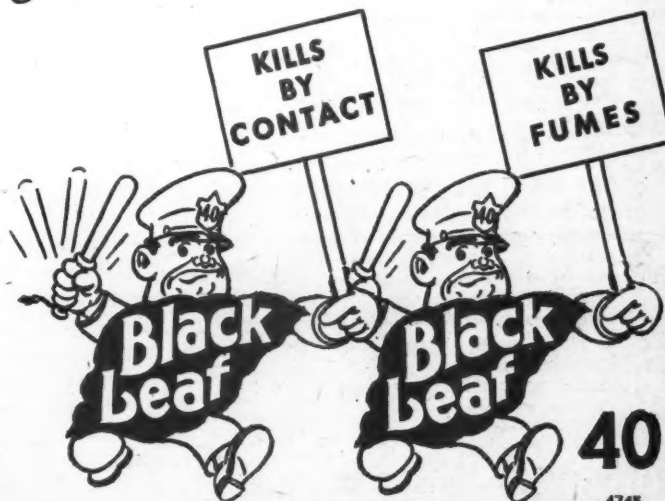
**BLACK LEAF 40, BLACK LEAF 155**

**BLACK LEAF 40** is highly toxic to insects, but relatively safe to plants — And when used with summer oils, the fruit need not be washed.

**BLACK LEAF 155** — companion product to Black Leaf 40 — is "fixed" or non-volatile — and offers prolonged protection against attacks of such insects as codling moth, berry moth and leafhopper on apples, pears and grapes. Does not injure the foliage, and control of worms and stings is high.

**TOBACCO BY-PRODUCTS & CHEMICAL CORPORATION, INCORPORATED, Louisville 2, Ky.**

Black Leaf insecticides have long furnished protection against insect parasites on plants and animals. The companion products mentioned on this page help round out the protection furnished the orchardist and gardener.



LOOK FOR THE LEAF ON THE PACKAGE

Your  
"DUST DOLLAR"  
GOES FARTHER—



Save Insecticide—  
Do a better job—

use a HUDSON  
"ADMIRAL"  
DUSTER

You waste no valuable pest-killing powder when you apply it with a Hudson Admiral Duster. This correctly designed duster gives you perfect control—puts each and every particle of dust where it will do the most good. It discharges dust so uniformly that it reaches pests between and under leaves of plants—or hidden in nests, cracks or corners of poultry or livestock buildings. Get maximum killing power out of each "dust dollar." Get an Admiral today at your local dealers.



#### 6 REASONS FOR ADMIRAL'S MAXIMUM KILLING POWER AND SAVINGS

- Long reach—Dusts hard-to-get-at places. Keeps dust away from face. No stooping, no stretching.
- Rotating nozzle—Lets user dust up, down, sideways.
- Easier to operate—Smooth, lazy stroke does the job.
- Easier to fill—Wide mouth, large cap with built-in scoop.
- Holds More—Extra capacity—less refilling.
- No oiling—plunger is permanently lubricated.

#### HAS MANY USES ON THE FARM

Outdoors and indoors, Admiral dusters fight all kinds of pests. Kitchen, dining room, bedroom—poultry house, barn, fields and gardens: these are some of the places where you need an Admiral. Keep several of these efficient, economical dusters on hand.

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SPRAYERS AND DUSTERS  
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FARM VENTILATION EQUIPMENT  
POULTRY EQUIPMENT

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## GOD'S LITTLE APPLES

**U**NDERSIZED and tart apples can be made into a delicious drink "just as sure as God made little apples," for when the juices of the tart are combined with the nectar of the sweet, a really refreshing drink is the result. There is no reason for wasting small fruit, and the production of apple juice can be profitable, as the owner of the Neal Fruit Farm in West Richfield, Ohio, has discovered.



Stanley Hall, manager of the Neal Farm, examines a sample of their product.

Even when frost killed about 95 per cent of the Neal Farm's apple crop, the farm was able to show a profit as a result of the enterprising forethought of its owner, Herbert C. Neal. Neal is not only a grower, but he is also a fruit processor. He is making—and selling—apple juice.

When the crop was lost last year, he and Stanley C. Hall, the Neal Farm manager, procured apples from other growers and, by processing them into apple juice or re-selling them in the store trade, managed to clear a profit.

There is more than insurance against a loss of the local apple crop in juice making, too, for it helps solve a bothersome labor problem. By setting up an apple juice plant on his farm, Neal gives his workers assurance of steady full-year employment instead of only seasonal jobs.

Full-year employment for the Neal Farm workers is possible since the processing plant begins operation at the end of the harvest, and keeps the men occupied until spraying begins again in late winter and early spring. Eight men are employed steadily at Neal's, although, of course, more are needed for harvesting the crop.

Before Neal designed the apple juice plant, he had been making cider, but he always found that it was difficult to judge the quantity of cider that could be sold in a season before the product spoiled. Since the cider could not be stored for future sale, and since there was considerable loss from

spoilage each year, Neal installed pasteurizing equipment and started production of apple juice about five years ago.

Today, the plant has a top capacity of 700 cases of bottled juice a day, and an expansion program is in the offing. The present plant includes a washing and sorting assembly, a press, Centrifuge, flash pasteurizer, bottling machine, and labeling device.

Before processing begins, the apples are selected to make a blended juice of "just right" flavor. Sweet apples such as Golden and Red Delicious are selected to be pressed with more tart fruit like Stayman or Baldwin. Then the apples are all washed, brushed, and wormy ones removed by hand before pressing. Hall says that only sprayed fruit is used. Cloudy residue is cleared from the juice by centrifugal force when the liquid is spun around in the Centrifuge. It comes out sparkling clear, and then passes through stainless steel pipes into the flash-pasteurizer. This machine heats it until the bacteria which cause spoilage are killed. Once pasteurized in this manner, the juice can be stored indefinitely in sealed bottles. Under this process, no preservative is necessary.

In order to handle the large supply of stored fruit that profitable operation entails, the Neal Farm has a refrigerating capacity of 65,000 bushels. The fruit is pressed as soon as possible, though, in order to get the full flavor of fresh apples.

Since the farm is already selling all the apple juice the plant can handle right now, Hall says that Engineer Eben Bistline is pushing plans to increase production considerably by the beginning of next season.

"We want to increase production



After flash pasteurizing, the bottles are filled and then passed through this cooling tray before labeling.

facilities as soon as possible, because apple juice is what the people want, and we intend to provide it for them," Hall said.

The Neal Farm has discovered one reason why God made little apples.

AMERICAN FRUIT GROWER



# THE "STANDOUT" AMONG DDT SPRAYS

## IN THE SPRAYER



- 1 Mixes Completely**  
in hard or soft water
- 2 Stays Suspended**  
in spray mixture with agitation
- 3 Develops "Fine Flocc"**  
important for best spray coverage

# GENITOX S50

## 50% DDT SPRAY POWDER

## IN THE FIELD



- 1 High-Deposit**  
on foliage and fruit
- 2 Minimum Run-off**  
in spray drip
- 3 Unexcelled "Kill"**  
of codling moth and other insects

### Other Orchard Brand Products for the Fruit Grower

**LEAD ARSENATE**  
Astringent and Standard

**Micro-Particle**  
**APPLE DRITOMIC\* SULFUR**

**DRITOMIC\* SULFUR**  
for Peaches

\*Reg. U. S. Pat. Off.

**BENZENE HEXACHLORIDE**  
Various Formulations

**GENICIDE\*-A**  
For Codling Moth and Mites

**SPRAYCOP\***  
Insoluble Copper Fungicide

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Sales and Technical Service Offices Serving Agriculture from Coast to Coast



AS A MAJOR PRODUCER OF DDT from its earliest manufacture in the United States, General Chemical Company has made extensive studies of the insecticidal values of this remarkable "bug killer" in various formulations. Genitox S50 is the outgrowth of this knowledge, combined with experience spanning nearly 50 years in the manufacture of spray materials.

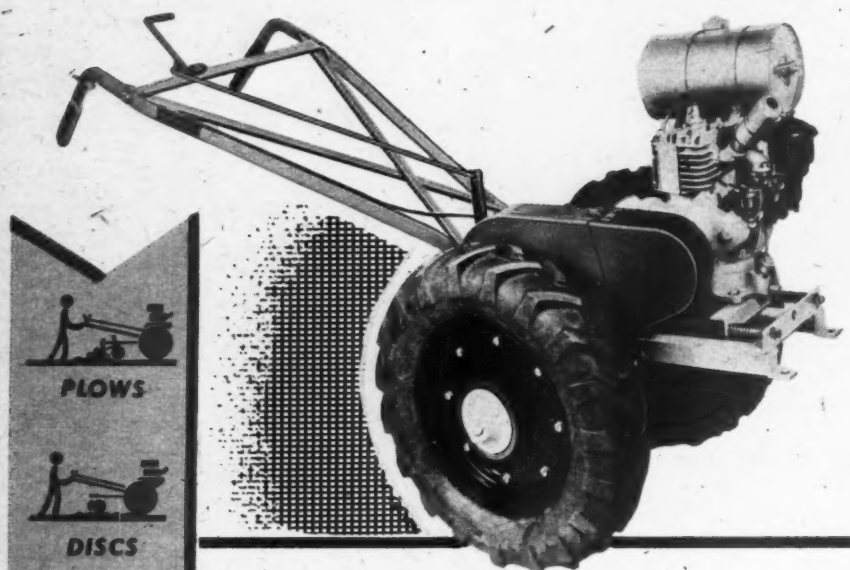
GENITOX S50 is formulated and processed to give growers all the essentials needed in a DDT insecticide. That is why users from coast to coast find it the "standout" among DDT sprays, both for its trouble-free action in the sprayer . . . and for its high insect control performance on the fruit and foliage.

ABOVE ALL, GENITOX S50 offers fruit growers the important feature of *high deposits* . . . a property built into all General Chemical spray materials. Growers everywhere have seen this better covering quality proved in their orchards with Genitox S50 just as they saw it with Orchard Brand Lead Arsenate, whose original finely-milled "flake particle" made it the nation's leader. The micron-size particles of Genitox S50 go into a finely flocculated suspension in the spray mixture. When sprayed, these fine particles tend to stay put where they hit with the very minimum of insecticide run-off.

THESE ARE ADVANTAGES you *want* and *need* in the DDT spray that goes on your trees; the advantages you *get* with Genitox S50. Accept no substitutes.



## THE ALL-PURPOSE GARDEN TRACTOR FOR THE PROGRESSIVE FRUIT GROWER



Other BREADY  
implements:  
Seeder, Roller,  
Lawn Mower

Progressive fruit growers the nation over use the BREADY garden tractor. Look at these BREADY features and you'll see why:

**ONLY GARDEN TRACTOR WITH "FRONT-HITCH" ...** The "Front-Hitch" method of power application puts the burden of the pull "right across the shoulders" of the tractor, making it hug the earth, deliver 30% more traction and utilize every ounce of power.

**EASY TO OPERATE ...** You simply guide the BREADY—ratchet wheels turn it "on a dime". Even housewives and children can operate the BREADY—with ease. Implements are hitched on in a jiffy.

**SAVES TIME—MONEY—LABOR ...** BREADY does the job right the first time—and does it quicker. BREADY is priced low and is economical to operate. Big 1½ H.P. motor uses only 1 gallon of gas in 5 hours.

*Write Today for Free Folder*



**GARDEN TRACTOR SALES COMPANY**  
BOX 200  
SOLON, OHIO

## The Neglected Step-Child

By C. H. MILLER

**P**ROBABLY the most neglected of our common fruits and yet the one that will show a handsome profit if given a little care is the lowly quince. Here in New England, where the writer lives, fruit growers and home gardeners go in heavily for peaches, apples and berries of all kinds. But it is unusual to find a quince tree or two that have been given any care at all or that have been sprayed or trimmed like the other fruits. You'll usually find a quince tree or two stuck away in some out-of-the-way place, frequently (in the case of farm houses) where the kitchen sink water runs out on the ground. No one seems to know where farmers a hundred years ago got the idea that greasy, dish water was good for quinces but the idea persisted.

While there are perhaps a dozen flourishing apple and peach orchards within a few miles of where this is being written, no one has gone in for quinces. And yet, only last year, quinces, when they could be obtained, were selling at roadside stands for eight to ten cents each. One roadside gardener told the writer that he put out on his stand a hundred quinces he grew himself from two bushes, and in two days they were all sold. Ten dollars clean profit from two bushes isn't to be sneezed at. As the farmer's boy who picked and sold them remarked, "ten bucks ain't hay."

Quince jelly is one of the most delicious fruit jellies we have, either homemade or commercially packed. Yet it is one of the most difficult to obtain. Frequently it is doctored up with apples until the delicate quince flavor is about gone. We asked one storekeeper who sold us a jar how much quince was in it. "Oh," he said, "I guess it's about 50-50."

After tasting it, we were reminded of the story of the Jersey City man who was marketing rabbit sausage. The government inspector got after him and asked just how much was rabbit and what the rest was. He admitted the rest was horse meat. "Well how much of each?" the government man demanded.

"Oh," this man also said, "About 50-50." Then he added, with a laugh, "One rabbit to one horse."

Why not plant a few quince bushes this summer or spring? They require practically no care and they are subject to but few diseases. Quinces keep wonderfully. When housewives are busy with other canning, they can be forgotten.

One reason that quinces are the

(Continued on page 40)

**AMERICAN FRUIT GROWER**



# LOOK OUT FOR THIS FELLOW



RED MITE

RED MITE

RED MITE

RED MITE

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## Kill him with **KILLEX-100** in your DDT sprays



Forewarned is forearmed, so don't let European red mites infest your apple orchard.

Kill them with Killex-100 by combining it with DDT sprays against codling moth.

Newest product of Sherwin-Williams research, Killex-100 is the complete answer to your problem of controlling European red mite on apples during the growing season.

Killex-100 is a one-hundred percent concentration of hexaethyl tetraphosphate. It is also sure-death to green apple aphid, rosy aphid, woolly aphid and black cherry aphid. Killex-100 is effective against aphid even when applied at low temperatures.

It is easy to use and economical—one-half pint in 100 gallons of water—and may be combined with DDT and wettable sulfurs.

Order Killex-100 now while supplies are available.

**WRITE US FOR FREE FOLDER TODAY**

in Canada ask for Green Cross Insecticides and Fungicides

### SHERWIN-WILLIAMS SPRAY MATERIALS

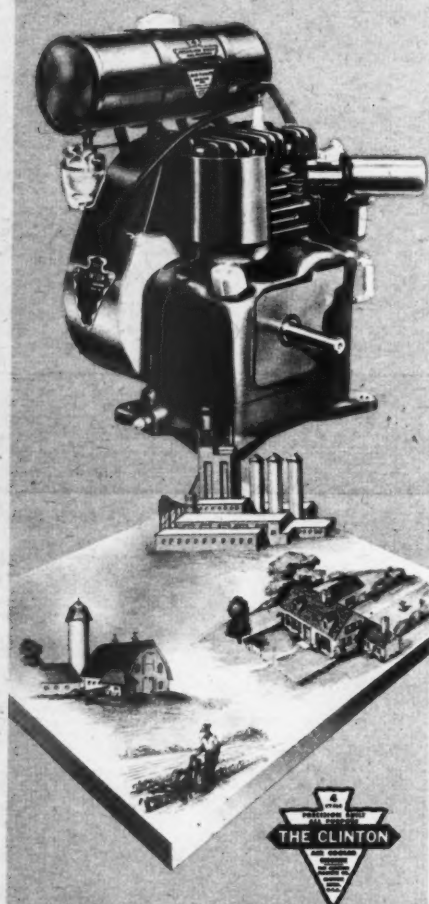
INSECTICIDE DIVISION



# The CLINTON

Established Leader  
of Finer Quality  
**ENGINES**

1 to 2 H.P. 4-cycle Air-cooled



Clinton engineers have been consistent sticklers for quality. . . . In building the world's most outstanding engine, costs were secondary. . . . Quality was the prime factor in selection of all parts. The Scintilla Airplane type magneto is hermetically sealed; no moisture can enter—sure fire high voltage starting, with even performance at all speeds.

Clinton provides a large diameter steel forged crankshaft, longer length bearing surfaces and bearings ample for a 3 H.P. Engine. . . . Expensive, yes, but the best for quality and longer life.

Other features that have put the Clinton on top are the Patented Finned Manifold—no vapor lock—and greater economy of operation. . . . Flyball type mechanical governor, enclosed, running in oil. . . . It positively governs at all operating speeds.

See your local Clinton dealer for authorized Sales and Service.

THE WORLD'S LARGEST MANUFACTURER  
SPECIALIZING IN 1 TO 2 H.P. ENGINES

**CLINTON MACHINE CO.**

Dept. 101A

CLINTON, MICHIGAN

# AMERICA'S FRUIT QUEENS



Margie Fields, National Cherry Queen.

Lovely as an orange blossom is Florida's Citrus Queen.



Mission Times Photo

Betty Knox, Queen of Texas Citrus Fiesta.



Jean Olson, queen of the Washington State Apple Blossom Festival.



Janis Carter, chosen Citrus Queen for 1947 by California and Arizona growers.

International News Photo



# RUI QUEENS



Queen Shirley, of the Payette, Idaho Blossom Festival.



Bachrach Photo

Jean Lane, daughter of Maryland's governor, is Queen of the Shenandoah Apple Blossom Festival.

## Now IT'S A CINCH! Dusting is EASIER with the NEW ROOT Nap-Sak

### 1 LIGHTWEIGHT

Only 7½ pounds total with all accessories.

### 2 EASY OPERATION

Light...easy...rhythmic pumping produces prolonged discharge.

### 3 STRONG BLAST

Instantaneous, positive action produces high velocity dust discharge which penetrates and sticks to dense foliage.



Light weight makes knapsack dusting easier with this new ROOT NAP-SAK Duster. It slips on quickly . . . out of the way. It operates easily, naturally, efficiently. Wide, padded shoulder straps make the NAP-SAK Duster easy to carry . . . all day long. Durable, lightweight, aluminum construction eliminates heavy-weight mechanism. Powerful, hand-operated, high-leverage bellows produces a strong, prolonged blast of any commercial dusting material. Twenty-pound capacity dust chamber has wide opening for easy filling. Adjustable, dosage control economizes on materials. The new ROOT NAP-SAK is available for immediate delivery. See it at your dealers or write for descriptive literature today.

The complete line of ROOT Dusters include: Plunger, NAP-SAK, Crank, Traction, Saddle, Engine Power and Power-Take-off models. Also, there is a ROOT All-Purpose Spreader for seeds, fertilizers, insecticides, etc.



## NACO MANUFACTURING CO.

(FORMERLY ROOT MANUFACTURING CO.)

7631 Roseberry Ave. (P.O. Box 310) Huntington Park, Calif.

AMERICA'S FAVORITE SPARK PLUG



best  
for  
every  
farm  
use

No farmer needs be told that the busiest season is here now, and for the months immediately ahead. Every piece of power-farming equipment will be in full use—car, truck, tractor and implements—and should be in A-1 shape to meet all demands if it is to be a time and money saving factor. That's where dependable Champion Spark Plugs can and will contribute materially. For they not only insure better, more economical performance in every engine, but that extra dependability which is synonymous with the name Champion. That's why Champion is Agricultural America's Favorite Spark Plug—Insist on Champions for every farm engine. Champion Spark Plug Company, Toledo 1, Ohio.

Listen to the CHAMPION ROLL CALL, Harry Wismer's fast sportscast every Friday night, 9:55 EDST over the ABC network

# CHAMPION

dependability

IS A TIME AND MONEY SAVING FACTOR **NOW**

# APS

## "WHAT'S IN A NAME?"

AN INTERESTING case in the use of a variety name was brought before the annual meeting of the American Pomological Society in St. Louis by Carroll Miller, of Martinsburg, West Virginia. In that area Stayman is gaining in favor, both in the orchard and in the market. The use of the name Stayman-Winesap, instead of just Stayman, causes some confusion in the market in the minds of some people because they do not particularly like the "Old Time Winesap," that is, Winesap. Mr. Miller asked for a ruling on the use of Stayman vs. Stayman-Winesap by the American Pomological Society.

It was pointed out in the discussion that an attempt was made to give an official list of the names of the principal commercial varieties in *Standardized Plant Names*. The list for fruits and nuts was prepared by the Committee on Nomenclature and submitted to the editors of S.P.N. for publication about 1940. In the list submitted, Stayman Winesap was given as the correct name for this variety. This followed the precedent established in 1881 by Downing in the first publication of the name as Stayman's Winesap, and the form used by Beach in 1905 in the Apples of New York.

It will be seen, then, that Mr. Miller raises a very interesting question in the use of a name—a question which had not appeared before in spite of the long history of this variety. Upon analysis, it will be evident that Winesap has been used as a group name. There is good reason, then, for the confusion encountered in this instance and it would appear that the position taken by the Society at the St. Louis meeting (February 21, 1947) to simplify the name to Stayman would be justified in spite of the printed record.

By referring to Section 10 of the Code, it will be noted that it is stated that "the use of general terms—should be avoided." This would conform also to Section 17 which provides that trends in the use of a



## CONFUSION ARISES OVER VARIETY NAME IN WEST VIRGINIA

name can be reviewed by the Society and where necessary action may be taken to correct a situation.

This case is, then, before fruit growers. Since it is so difficult for the trade to absorb only a few names at best, it would seem wise to let Stayman and Winesap stand on their own merits in the trade under these two names. The use of these two names would thus solve the problem in time just as usage is at present creating some confusion.

There is another interesting situation to watch in the use in the trade of the names Delicious and Golden Delicious. Here, as with Winesap, Delicious applied to two apples with such marked characteristics in color as red and yellow is actually bringing into quite general use Red Delicious and Yellow Delicious as distinguishing names for two of the best known varieties. This is an excellent illustration of the power of usage which would never be anticipated in naming a variety. That is why it would seem safe to recognize the fact that language is a "growing thing" and let usage solve the problem raised by Mr. Miller in the case of Stayman vs. Winesap.

To answer the question, then, of "What's in a Name?" let us say there is much in a name—perhaps as much as 25 or 50 cents per bushel. Let the best variety win!—M. J. Dorsey, Chairman, Committee on Nomenclature, American Pomological Society.

### AMERICAN POMOLOGICAL SOCIETY

Founded in 1843

#### OFFICERS

##### President

Stanley Johnson, South Haven, Michigan

##### Vice-Presidents in charge of:

National Apple Institute Program  
John Chandler, Sterling Junction, Mass.

Pomological Organization  
B. S. Pickett, Ames, Iowa

Spray Residue Research  
W. A. Ruth, Urbana, Illinois

New Fruit and Nut Variety Lists  
H. P. Gould, Washington, D.C.

##### Nomenclature

M. J. Dorsey, Urbana, Illinois

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## CONTROL PESTS WITH FOG

The fastest, most economical method known of applying spray solutions from the ground.



**BES-KIL**  
AEROSOL  
GENERATOR

With the **BES-KIL** you can treat up to 8 acres of mature trees per hour with 50 gals. of solution!

**T**HE name BES-KIL spells economy in pest control work.

It spells a new and revolutionary concept of the time, labor and quantity of solution required for effective coverage.

It means that farmers and growers and other users of pest control equipment, no longer need to think of spraying in terms of bigness... big equipment, big labor costs, big tanks which have to be refilled every few minutes... and of long hours, days or weeks of working time.

It means extra dollars in the bank, time saved for other work, less labor to hire, extra dividends on your invest-

ment in an essential piece of farm machinery.

Now is the time to make this investment... to purchase, at moderate cost, pest control insurance that will give you protection for years. An investment that will pay itself back times over in more and better crops, in increased yields from livestock, and in time and labor saved.

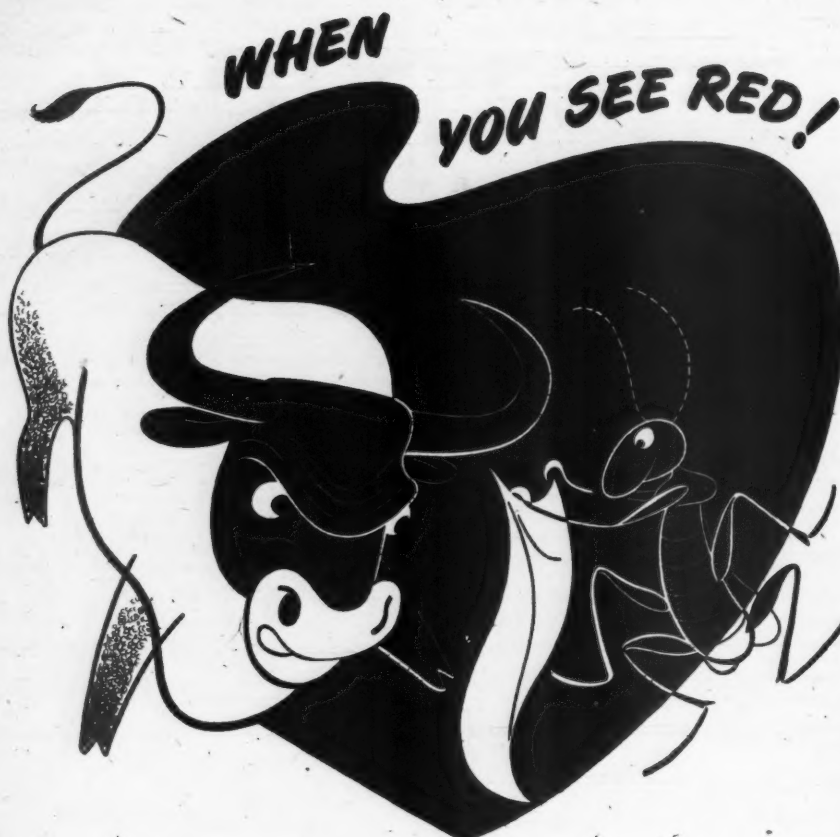
If BES-KIL—the genuine fogger—is not already in your territory, it will be soon. Watch for it! In the meantime, a word to us will bring you complete information on this amazing new insecticide applicator.

**SAVE TIME...LABOR...MONEY**



**BESLER  
CORPORATION**

4053 Harlan St.  
EMERYVILLE 8,  
CALIFORNIA



● **WHETHER IT'S DUE** to increasing infestations of the red mite and red spider, or the higher costs of many spray materials, consider the use of summer spray oils.

With your early season apple tree sprays already applied, you, as a business man and a practical fruit grower, are anxious to do 4 things:

1. Control orchard pests and diseases.
2. Grow clean apples with a good finish.
3. Maintain thrifty foliage throughout the season.
4. Hold costs to reasonable limits!

**On a DDT spray program** we recommend Superla Summer Spray Oil combined with nicotine, or Noco-Sol Summer Spray Oil as an alternate, for an in-between brood spray, or for finishing off the season. This will give you:

1. Protection against codling moth in the non-DDT sprays.
2. Effective counter measures against red mite and red spider build-up.

Superla Summer Spray Oil also can be used with DDT water suspendible powders but the mix must be safened by adding soy bean flour or bentonite.

**Where DDT is not used**, Nico-Sol or Superla Summer Spray Oil plus nicotine in a full schedule can be used effectively for control of codling moth, leafhoppers, red mite and red spiders.

**On a non-oil spray program** for red mite and red spider control, where there is need for a special miticide, use Superla Summer Spray Oil at  $\frac{3}{4}$  to 1 gallon per 100 for efficient, dependable control.

**A new development of DDT** in solution in summer oil—Nonpareil Summer Spray Oil with DDT. It is an effective and especially economical spray for codling moth, leafhopper, red mite and spider in certain areas. Write for recommendations.

You are invited to take advantage of Standard's many years of experience and extensive research in the field of insecticides. For more complete information and the name of your nearest dealer, call your Standard Oil office, or write:

## STANDARD OIL COMPANY

910 South Michigan Avenue  
Chicago 80, Illinois



# NEW

## NEW SPRAY BOOM

A new type of spray boom that can be attached to conventional sprayers to create a one-man, large volume, high pressure sprayer has been announced by the Hardie Mfg. Co. The new boom, which is operated from the tractor, is equipped with 24 spray nozzles. It is adjustable for spraying at different angles and distances.



## OIL-PAINT SPRAYER

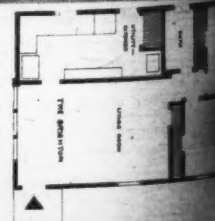
An electric paint sprayer that can also be used to oil intricate parts of farm equipment is offered by the Lowell Mfg. Co. Called the "Thoro-Sprayer," this handy tool sprays varnish, enamel, lacquer and stain as well as oil and paint. Using AC or DC

# LOW COST

**STRAN-STEEL** homes, selling in the \$4000 to \$6000 class, have been



This model of the Brighton was constructed for southern climates. The plans show the large amount of space available in these homes.

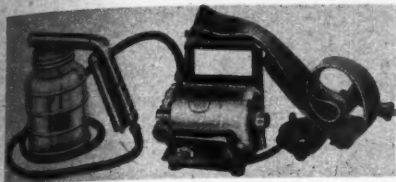


AMERICAN FRUIT GROWER



## NEW SPRAY BOOM OIL-PAINT SPRAYER DDT SCREEN COATING

current, the unit develops 22 pounds of free air, and weighs 8 pounds.



### DDT SCREEN COATING

To help combat flies and other disease-carrying insects, DDT is now available in a colorless resin coating, called Pestroy DDT. Developed by Sherwin-Williams, it is sold by several distributors. The material can be applied as a paint to screens.



## HOUSING

approved as structurally acceptable for FHA financing.

Built of the arch-rib steel frame construction that made war-time Quonset huts so sturdy and dependable, the new homes have conventional floors and walls. Sheet steel exterior finishing is done with corrugated steel.

The three photographs on the left show several plans adaptable from the basic plan. These units are ideal for housing projects on orchard or farm.





**"YES, SIR... THAT TIFA  
FOG GETS THOSE PESTS!"**

## ... DEATH-DEALING FOG FOR INSECTS

TIFA is the QUICK . . . SURE . . . ECONOMICAL method of insect pest control.

TIFA discharges newly developed as well as the older insecticides, fungicides, repellents or hormones in a *true fog* that *spreads quickly* over wide areas . . . *clings* to all objects in its path . . . *permeates* the smallest crevices.

TIFA . . . a compact, easily handled one-man unit, powered by a standard-make gasoline engine . . . can be used wherever insect pest control is essential . . . especially in orchards, on farms and ranges. And it's **BUILT TO LAST.**



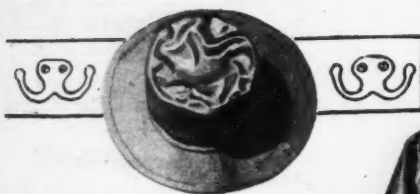
Write for illustrated folder on sensational TIFA—full details on how it operates, what it does, and official comments on its astonishing effectiveness.

# TIFA

**TODD INSECTICIDAL  
FOG APPLICATOR**

**A Product of  
COMBUSTION EQUIPMENT DIVISION  
TODD SHIPYARDS CORPORATION  
81-16 45th Avenue, Elmhurst, Queens, N. Y.**

SERVING THROUGH SCIENCE



U. S. STORM HAT

- Reinforced brim
- Sewed and strapped inside seams



U. S. SAVOY COAT

- Double-backed for extra service
- 11 ventilating outlets
- Heavy lining
- Corduroy edged collar

U. S. RUBBER BOOTS

- Leak-tested under water
- Snug over ankle and at heel
- Non-skid "Cleated" sole
- Long-wearing, free from cracking
- Shingled construction for wear and comfort



U. S. RUBBER ARCTICS

- 4 or 5-buckle styles
- Buckles firmly anchored
- Leak-proof buckle construction



**You'll keep DRY with U.S.**

Never before have we offered protective work clothing with such superlative comfort, feel and wear; engineered by U. S. scientific compounding and bonding of rubber-to-fabric — results of many years of experience as the largest maker of rubber work clothing.

*Sold only through Industrial and Retail Stores*

MAKERS OF

U. S. ROYAL  
RUBBER FOOTWEAR



U. S. INDUSTRIAL  
RAYNSTERS

**UNITED STATES RUBBER COMPANY**  
ROCKEFELLER CENTER • NEW YORK

## Home Atmosphere

(Continued from page 11)

raising and fattening beef. At the start of the war we saw the need, and began producing our own meat, butter and milk as our contribution to the war effort. It has worked so satisfactorily that no one would like to see it abandoned. One man takes care of all the stock, does the milking, and brings the milk and cream in to the 30° room in gallon jars, each bearing its owner's number. The entire job of milking, feeding, separating, cleaning barn and milk room is done with three hours labor per day. This supplies milk to eight families and more during harvest.

### Process Own Beef

Beef is butchered, cut, wrapped and frozen on the ranch. Pork we have butchered at a public packing plant, as it requires more equipment. All meat is frozen and apportioned every two or three weeks.

Gardening is also a community project, and all the expense, including harvesting of storage crops like potatoes, cabbage and carrots is borne by the ranch operation. Harvesting for table use and processing is done by the individuals. Usually this can be done with less time and trouble than it would take to make the actual purchase in the city. Fruit produced on the ranch is used in the same manner.

To cover the costs of these services, we make a charge of fifteen cents per hour. The orchard worker's wage, with housing furnished, is now eighty cents per hour, and we pay sixty-five cents. For the average family of four or five, the saving in food at retail prices would be about one hundred dollars a month. The average charge at fifteen cents for every hour worked amounts to about thirty-five dollars per month, while the actual cost of furnishing the food is about fifty dollars a month per family. If the ranch finds need for more workers, this cost will about balance the income derived from the charge.

### Balanced Farm Operation

Our goal is a balanced farm operation, and we are planting to achieve as long and as uniform a harvest as possible by growing as many different commercial fruits as will do well in our locality. By using a building and improvement program to fill in slack periods, we hope to create a fruit ranch with more than ordinary stability.

Remember—people who are steadily employed, have good housing, are well fed and enjoy pleasant surroundings, not only will do more and better work, but are much easier to live with.



# Depend on Alcoa Cryolite *2 Ways...*

**TOUGH ON  
CHEWING INSECTS**

**GENTLE ON  
EQUIPMENT**

## Tough on Chewing Insects

ALCOA Cryolite has long been established as the *dependable* insecticide for controlling chewing insects. You don't have to experiment or guess when you use ALCOA Cryolite.

## Gentle on Equipment

ALCOA Cryolite has negligible abrasive effect on dusting and spraying equipment. The particles are *smooth*—not formed by crushing. No sharp or jagged edges to wear out equipment rapidly.

**Stocks of ALCOA Cryolite are ample and strategically located for quick deliveries.**

Ask for free folder listing insects controlled and containing dusting and spraying chart. See your dealer or write to:

**ALUMINUM COMPANY OF AMERICA  
CHEMICALS DIVISION  
1737 Gulf Building Pittsburgh 19, Pa.**

Alcoa Cryolite is manufactured by Aluminum Ore Company. Formerly sold under the trade name "Alorco."

**ALCOA  
CRYOLITE  
INSECTICIDE**

## ORCHARD WORKERS

(Continued from page 13)

workers look for electric lights. Including them in the housing you build, or installing lights in existing units, will enable you to get better help.

**WATER.** An abundant source of good water is essential to the success of worker-housing. Workers need water for cooking, bathing and washing dishes and clothes. Other things being equal, the more convenient and plentiful the water supply, the more satisfied the help will be.

**SHOWERS.** Growers who have provided showers report that their crews feel better and do more work since the facilities have been added. A shower need not be expensive. Some growers have rigged them under tanks in which water is stored, for as little as \$10.

**LAUNDRY FACILITIES.** Growers who provide running water, a stove on which it may be heated, laundry tubs, a wringer and some clothesline usually find that the investment pays off, over and over again, in less loss of time and more good will.

It is often possible to arrange both showers and laundry facilities in such a way that they can be used to advantage by the farmer's family, as well as by the help.

Housing should be ready when workers come. Living quarters that are still filled with empty baskets, or littered with broken crates and other refuse at the time the help arrives, give an unfavorable impression.

Have a definite understanding before workers are allowed to move in. This should cover wages and hours; what you are going to supply in the way of furnishings; rules regarding cleanliness and order; and other conditions of employment.

**PROVIDE SUPERVISION.** The success of any housing project depends, to a considerable extent, on the supervision it receives. Inspections should be made at regular intervals. The supervisor should be fair and reasonable but firm. Necessary rules should be simply stated in writing, posted where all can see them, and enforced.

**TREAT YOUR HELP** with consideration. Workers react quickly to courtesy and consideration. Make them feel welcome and at home. See that all equipment is in good order. Provide adequate first aid kits.

**GET THE NAMES** and home addresses of all of your employees.

Good help makes farming easier and more profitable. One of the best ways to attract good help is to provide comfortable housing. An investment in good housing is an investment that you will never regret.

## It's Apple-Growing Time! ... Time for Puratized!



## PURATIZED<sup>\*</sup> T.M. U.S. Pat. Off. Agricultural Spray

Puratized Agricultural Spray is a new, outstanding organic fungicide which offers dependable protection against the ravages of apple scab.

As an early spray recommended through the first cover application, an "ounce" of Puratized protection now — 1 pint to 100 gallons of spray — means a lower cost spray program, greater yields, and a high degree of scab elimination.

Puratized Agricultural Spray is easily handled — simply add contents to spray tank and apply according to instructions.

Available at your local dealer. Consult your Niagara field man for recommendations, or write today for complete details.



Distributed by  
**NIAGARA SPRAYER AND CHEMICAL DIVISION  
FOOD MACHINERY CORPORATION  
Middleport, New York**

Manufactured by  
**GALLOWHUR CHEMICAL CORPORATION  
New York, N. Y.**

# CONTROL RED MITE

at the same time  
you control

## CODLING MOTH

**D-X SPRAY**

You no longer have to take the time and trouble to do an extra spraying job to control red mite. You can control both red mite and codling moth at the same time with D-X Spray.

Simply add 1 1/2 pints D-X Spray to your regular DDT or arsenate of lead cover sprays when red mite starts to hatch. Three sprays are usually sufficient to obtain thorough red mite control—at the same time increasing your kill of codling moth. One gallon makes 600-800 gallons of spray.

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## Increasing Fruit Set in Delicious Orchards

AT LEAST part of the solution to the problem of getting a good fruit set on Delicious apple lies in providing a nearby source of suitable pollen, an extensive survey by R. H. Roberts, University of Wisconsin horticulturist, indicates.

Roberts studied the fruit set—and the growing practices associated with it—in 166 plantings of Delicious and its red sports such as Starking. He worked in many states to carry out this investigation, from Minnesota and Arkansas on the west to Nova Scotia and Virginia on the east.

In a previous study Roberts found a clue to the shy-bearing habit of Delicious when he discovered that honeybees do not readily pollinate the blossoms of this variety. This made it desirable to learn what fruit growers in Wisconsin and elsewhere are doing about the pollination of Delicious, and with what results.

In every state, Roberts found the tendency was for Delicious to make a good fruit set where it was grown adjacent to varieties which make good pollinators for it. In all the 166 orchards surveyed, there was not a single instance of a poor Delicious crop where an adjacent good pollinator was making a heavy set.

The Delicious fruit set dropped sharply as the distance from a pollinator increased. Compared with Delicious adjacent to a pollinator, average fruit set on this variety dropped nearly 26 per cent where the pollinator was three rows away, and 33 per cent where it was five rows away.

There were a very few instances of good Delicious sets at a distance of four or five rows from the pollen source. In all these cases, bees or bumblebees were plentiful; some of the orchard operators were using two colonies of honeybees per acre.

### Plant Narrow Blocks

Bringing in a very heavy bee population does not seem to be the most practical way to obtain good Delicious crops. In every case in which this was done, other varieties than Delicious were over-loaded with fruit—so heavily loaded that it would require thinning to obtain apples of good size and quality, and to keep the trees from going into the undesirable biennial bearing habit.

Rather than introduce an unusually large number of bees, it appears to be better to plant Delicious alongside a good pollinating variety; in other words, making Delicious



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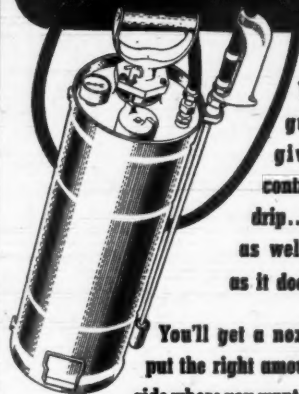
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blocks never more than two rows wide.

That planting Delicious in narrow blocks works out well is shown by the examples of entire areas, as well as of individual orchards in all areas. In Nova Scotia all varieties commonly are planted only two rows wide; in New Hampshire Delicious usually is planted only as a pollinizer and is surrounded by trees of other varieties. In these areas the survey did not reveal a single instance of poor fruit set on Delicious.

Significantly, it is in the Middle West and to some extent in the Southeast that Delicious most commonly has produced poor crops. In these sections it has been the practice to plant apples in large blocks of single varieties.

What of the orchardist who already has his Delicious planted in large blocks? In the long run, the most practical remedy seems to be to graft a scion of some good pollinating variety into each Delicious tree or every other tree. One of the most successful Delicious growers encountered in this investigation had done that. Until the grafts are large enough to supply pollen, "bouquets" of pollinating varieties may be brought into Delicious blocks at blossoming time.

#### McIntosh a Good Pollinator

Good varieties for pollinating Delicious, as revealed in this study, include McIntosh, Golden Delicious, Rome and its red sports, and Northwestern Greening.

Some other varieties are doubtful pollinizers for Delicious. Duchess pollen is known to "set" Delicious when applied by hand, but did not appear to be giving good results in the orchards encountered in this investigation. Winesap, on the other hand, was effective in the Southeast; but there is a question whether the pollen of this variety is functional in northern states, and at all events Winesap is not well adapted as far north as Wisconsin.

A few varieties do not seem very desirable for inter-planting with Delicious regardless of whether or not they pollinate it, assuming that the fruit grower is interested in good crops from all varieties. Such heavy-setting varieties as Duchess, Golden Delicious, Transparent, and Wealthy tend to be greatly overloaded if enough bees are present to produce a good fruit set on even narrow blocks of Delicious.

#### Vigor Important

Delicious, like other varieties, tended to set most fruit where the trees were in a suitably vigorous condi-

(Continued on page 40)



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## STATE NEWS

(Continued from page 18)

**OHIO, April 21**—Blossom prospects, all fruits, average to above average. Blossom time normal to late this year, favorable for avoiding spring frosts. Ample time for dormant sprays; scab spores now menacing new growth. Apple crop considerably above average expected. Peach prospects splendid. Sweet and sour cherries, plums and pears, all indicate favorable blossom prospects. Grape prospects excellent.—*Frank Beach, Sec'y, Ohio State Hort. Soc., Columbus.*

**PENNSYLVANIA, April 21**—Fruit crop indicates normal production. To date, no injury. Middle June best time for estimate and October first much safer. Many areas susceptible to frost until middle May.—*J. U. Ruef, Sec'y, Penn. State Hort. Soc., State College.*

**SOUTH CAROLINA, April 22**—Fruit prospects indicate harvest larger than record 1946 crop. Third consecutive year for large bud crop and heavy fruit set. Full bloom, April 7, latest on record. Close to a week's spread between Spartanburg area and Fort Valley.—*Roy J. Ferree, Ext. Horticulturist, Clemson.*

**SOUTH DAKOTA, April 16**—We are still in the clinging embrace of winter. Blossom time still far off. Our trees had a complete vacation last year. Expect good crop this year. Fruit buds are fat and numerous.—*W. A. Simmons, Sec'y, S. D. State Hort. Sec., Sioux Falls.*

**TENNESSEE, April 23**—Trees and berries wintered in good condition. Heavy bloom and good spring weather promise heavy crops. Apple and peach set heavier than 1946. Strawberry prospects average; acreage up over 1946. Growers interested in Fermate and Karbam to stop russetting on Golden Delicious.—*J. C. McDaniel, State Hort., Nashville.*

**UTAH, April 22**—Bloom heavy, all fruits. Frost damage great on apricots, not much harm to peaches, sweet cherries, apples, or pears. Pollination weather excellent for peaches and sweet cherries.—*A. Stark, Sec'y, Utah State Hort. Soc., Salt Lake City.*

**VIRGINIA, April 24**—Season 10 days late. Peaches expected to equal or exceed 1946 crop. Peaches bloomed in early April in eastern Virginia, apples expected full bloom in Valley and northern Virginia by May 5. Weather favors scab.—*A. H. Teske, Ext. Hort., Blacksburg.*

**WASHINGTON, April 21**—Early season has rushed spraying, and some growers have had difficulty in getting dormant sprays on. Trees in good shape and prospect for good crop excellent. European red mites reported increasing.

**WEST VIRGINIA, April 21**—Weather bad for early spraying, nevertheless oil and dinitro applied. Scab spores began to germinate 17th and cool wet weather followed, making scab threat serious. Bloom promises to be heavy except on Stayman, York and Winesap. Peach, cherry and pear prospects are for heavy crop.—*W. H. Prettyman, Ext. Hort., Inwood.*

**WISCONSIN, April 23**—Season very late with apple buds just breaking this week. Growers optimistic as conditions have favored good crop. Red mite heavy last year, growers using 3% dormant oil. If wet weather prevails, scab will keep unsprayed fruit off market.—*H. J. Rahmlow, Sec'y, Wisc. Hort. Soc., Madison.*



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## BOOK REVIEWS

### Fifty Tropical Fruits of Nassau

For the fruit epicurean with a spirit of adventure, here is a new book which should provide several hours of delightful reading.

*Fifty Tropical Fruits of Nassau*, (\$3.50) by Kendal and Julia Morton, not only brings to its readers a wealth of information about fruits which grow in Nassau, but with the use of fifty-five close-up photos, shows what the fruits look like and how they grow. The volume deals with the history, description and utility of the fruits, including attractive and delicious ways of preparing them.

Brief sketches of each fruit are written without technical or horticultural terminology or detail and are easily understandable to the layman.

### General Horticulture

*General Horticulture*, (\$4.00) by T. J. Talbert of the University of Missouri, is a book which covers the field of general horticulture adequately for both the student and the producer of fruits.

The goal of the book is to present a complete, modern view of the culture of fruits, vegetables and ornamental plants. Horticultural problems are discussed in simple understandable words, with chapters on subjects such as pollination, varieties and fruit thinning, propagation, soils, pruning, fertilization, insects, diseases and spraying, as well as chapters devoted to various fruits.

### Drought, Its Causes and Effects

A comprehensive study of the causes of drought and means of combatting this recurrent peril is discussed in the book, *Drought, Its Causes and Effects*, (\$3.00) written by I. R. Tannehill, Chief of the U. S. Weather Bureau's Division of Synoptic Reports and Forecasts.

In common, everyday terms the author discusses the key signs of drought and the forces that produce it. "Droughts are not mere chance occurrences; they are part of a physical process which can be measured and studied and predicted with increasing precision," he asserts. As a study of rainfall as it affects our whole national economy, this book should be of particular interest to farmers and fruit growers.

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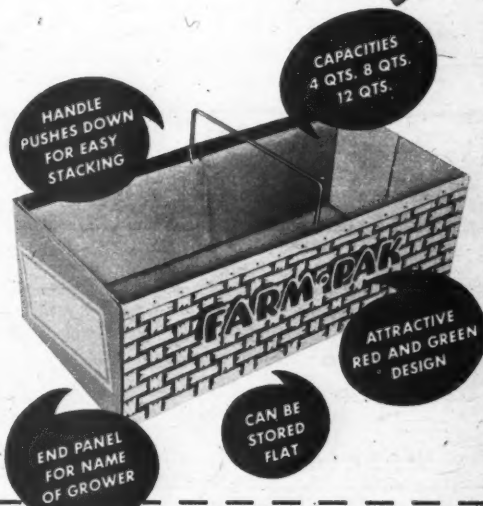
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## Who'll Pick Your Fruit?

(Continued from page 14)

gathered without the approximately 125,000 prisoners-of-war available in the fall of 1945 and with 30,000 fewer foreign workers than were utilized a year earlier, indicated improvement in the farm work force since V-J Day. There is also proof of effort being constantly made to hold to a minimum certification for foreign workers, thereby avoiding the possibility of Nationals of another country being employed on farm jobs that war veterans and returned war workers might be capable and desirous of performing.

At present, the farm labor supply program of the Department of Agriculture and the State Agricultural Extension Services is authorized through December 31, 1947. It is well to keep in mind that H. R. 2102 is simply an enabling act carrying authority for an appropriation. Funds for the continuation of the current farm labor program during the last six months of 1947 will have to be appropriated later either in connection with the 1948 supply bill of the Department of Agriculture, or be included in one of the deficiency bills.

How many Nationals from other lands of the Western Hemisphere will be required in 1947 to supplement the supply of domestic agricultural workers? The final answer to that question will, of course, depend upon the spring planting season and whether the fruit crop is destroyed or seriously damaged by freezes in certain major producing areas.

Based on recent surveys of the extended number of outside workers required in 56 major and 200 entirely agricultural producing areas throughout the 48 states, the experience of the past four years will seem to indicate the possibility of 50,000 to 60,000 foreign workers being needed to care for "hot spots" during the 1947 planting, cultivating, and harvesting seasons. To be most effective and avoid the possibility of such workers depriving our own citizens from local work opportunities, it is highly important that the foreign worker group be kept as flexible as possible and utilized almost entirely on agricultural jobs requiring strong male workers, or involving repetitive farm tasks shunned by our own citizens during periods of high total employment.

The alert fruit grower in 1947 will plan to use local and migratory domestic agricultural workers, will provide suitable housing, see that those workers receive proper training in specific skills, provide appropriate

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work equipment and follow a system of management which stimulates increased output per worker. Even if war workers were available in abundance, which they are not, high wage rates make it mandatory from a financial point of view to utilize all farm labor efficiently.

A successful program for the handling of fruit harvest labor problems, which may be a good pattern for other areas to follow, was developed in the Appalachian apple area last year. There the growers of Virginia, Maryland, Pennsylvania and West Virginia are organized in the Appalachian Apple Service, with headquarters at Martinsburg, W. Va. In cooperative planning and organizing which started at mid-year, these growers and Extension's Farm Labor organization developed a systematic recruiting of local and domestic workers which was sufficient to harvest the 20 million bushel apple crop without the help of many foreign workers. This was accomplished through the development of harvest guides and maps, fact sheets and other information material and the use of newspaper advertising space and circulars. Before this information program was launched in the area and adjacent regions, it was indicated that the domestic labor supply had been exhausted and that a large number of foreign workers would be needed to save the crop. However, the outpouring of local and other domestic workers was sufficient to make it possible to get the job done with the help of only a comparatively few foreign workers.

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**Makes Bordeaux the  
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Superfine is made by an entirely new process of vacuum crystallization which assures high purity and uniformity. A premium product at no extra cost to you!

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Superfine crystals are about the size of coarse table salt. Pour them into a container and play the hose on them. They dissolve before the container is filled! It's the easy and efficient way to make Bordeaux!

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**Oldest and best known brand!  
The standard for over 50 years**

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Control with **TAT HEXATE—  
HEXAETHYL  
TETRAPHOSPHATE**

Send for **FREE Data Manual** on TAT HEXATE and other TAT Products Formulated with . . .

● **BENZENE HEXACHLORIDE**  
● **DDT** ● **ANTU** ● **2, 4-D**

**O. E. LINCK CO., INC., DEPT. F, CLIFTON, N. J.**

**NUT GROWERS  
NEWS**

**Rehabilitating an  
Old Pecan Orchard**

**H**OW A worn-out pecan orchard paid for itself in three years when it got a new master should prove beyond a doubt that soil conservation and adequate fertilizer applied with intelligence is a "must" in orchard procedure.

A. O. Alben, Associate Soil Technologist of the U.S.D.A. gives a full history of a neglected and non-productive hill-land pecan orchard in our 1945 report. Here I quote him only in part. He states that the orchard is located in Caddo Parish, Louisiana, and was purchased December 2, 1942. "Although the season was late, Austrian winter peas were planted at once at the rate of 25 pounds to the acre following an application of 150 pounds of 20% superphosphate disked in. The peas were plowed under the following spring before the trees started to leaf out. As the orchard had not been plowed for many years, many roots were disturbed and cut off, some as large as one's arm. Two diskings were given during the summer. The total yield of this orchard in 1943 was 250 pounds of nuts.

"The growth of the cover crop had been so poor in the spring of 1943 that it seemed evident that additional fertilizer was required. In early October of 1943, 250 lbs. per acre of 0-10-7 mixture was applied previous to the seeding of 30 lbs. to the acre of hairy vetch. An excellent crop of hairy vetch was turned under the following spring just prior to the appearance of the pecan leaves.

"Low fertility was so evident in this orchard that in 1944 an application of 200 lbs. per acre of 4-12-4 fertilizer was made. In 1944 the trees started growth vigorously and produced leaves having a healthy green color and a moderate to heavy pistillate bloom. A high-quality crop of 11,960 pounds was harvested in the fall of 1944.

"In October of 1944 two hundred pounds of 0-20-0 fertilizer was applied and thirty pounds of hairy vetch sown to the acre. An excellent green-manure crop was again grown and turned under before the leaves came out in the spring.

"In 1943 and 1944 cultivation during the summer consisted of two diskings. Rainfall was adequate so that a considerable growth of weeds occurred and these were worked into the soil with each disking. The green-

For  
*Production  
of Quality  
Fruit*  
**USE**

**CORONA DRY Arsenate of  
Lead**

**Corona Bordenux Mixture  
Dry**

**Corona 50-50-W — 50%  
DDT Wettable**

**DDT Dusts**

**Micronized Sulfurs\*  
Wettable — Dusting**

\*Reg. Micronizer Processing Co.,  
Moorestown, N. J.



**Corona Chemical  
Division**

**PITTSBURGH  
PLATE GLASS COMPANY  
Milwaukee 1, Wisconsin**

**DWARF FRUIT TREES**

**Belong in Your Home Garden  
ORDER NOW for Spring Planting**

Need little space, easy to care for—Bear delicious fruit. **APPLES:** choicest varieties—grafted on true Malling stock. Also:

**PEACHES—PEARS—PLUMS—APRICOTS  
NECTARINES—CHERRIES**

\$3.75 to \$9.00 each according to age. Also

**ESPALIERS—trained Fruit Trees**

The pride of the European gardens. Trellis grown in my own nurseries to suit American conditions. Decorative—Fruitful.

I have specialized exclusively—20 years in this country, my Swiss Ancestors 100 years in propagating the finest varieties of these trees. **Order NOW.** Stock is limited. Write for illustrated Folder O. Address:

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Port Chester · New York

KING STREET opposite COMLY AVENUE

**HAMILTON**

*"Spray Guns that pay"*

To thin makes good fruit. Poor spraying makes poor fruit

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BANGOR, MICHIGAN

**Six Models** A GUN FOR EVERY PURPOSE  
Send For **FREE CATALOG**

**AMERICAN FRUIT GROWER**



manure crops and weeds turned under helped the soil remarkably in its capacity to take up water during heavy rains. One gully had developed in the orchard to the extent that all the top soil had been carried away. This spring, following a two and one-half inch rain, no water flowed down this gully. All the rain was absorbed by the soil.

The financial record to spring 1945 was as follows:

Total cost to date, (spring 1945) including purchase of land, plowing, cultivation, removal of limbs and harvesting .....	\$6,272.22
Return from sale of crop....	4,366.00

"The 1945 crop should more than pay for the orchard, including its original cost and that of all operations connected with restoring it to a productive condition."

Mr. Alben makes the following remarks in conclusion: "From this grower's experience, a run-down, unprofitable hill orchard on good upland soil types can be rehabilitated by employing adequate culture and fertilizer practices. In rehabilitating an orchard under conditions similar to this one it probably would be well to start with an application of 400 pounds to the acre of 0-10-7 prior to the seeding of the winter cover crop. The following spring an application of 200 lbs. to the acre of nitrate of soda or its equivalent in any of the nitrogen fertilizers would be advisable. In later years when growth of cover crop becomes adequate the fall application of fertilizer could be reduced to 200 pounds to the acre and the spring application of nitrogen fertilizer discontinued. The fertilizer and cultural practices used in the rehabilitation of this orchard would be beneficial in keeping eastern Texas pecan orchards in production."

Dues in the Northern Nut Growers Association are \$2.00 per year, and our reports contain much more valuable information than can be reviewed in this column during the year.—*Mildred M. Jones, Secretary, Northern Nut Growers Association, P. O. Box 356, Lancaster, Penna.*

#### ANSWER TO QUESTION ON PAGE 18

The photograph shows a fine example of a bridge graft. The five grafted scions can be seen around the central trunk, which was 7 years old at the time of the graft. The grafts have 8 growth rings, so the tree is a total of 15 years old. The trunk is approximately 9 inches in diameter, the original tree being 4 inches in diameter, and the grafted part 5 inches across.

### PORTABLE, ALL-BRASS CHAMPION GIVES YOU ALL-PURPOSE SPRAYING AT LOW COST

Here's ONE portable sprayer that does the work of several. Nozzle quickly adjusted to spray anything... up, down or sidewise... as fine mist or 30-foot stream:

**INSECTICIDES • FUNGICIDES • OILS  
DDT • WEED KILLER • WATER PAINT**

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**IMMEDIATE DELIVERY**

**CHAMPION SPRAYER CO.**

Mfrs. of Portable Sprayers and Dusters  
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**PEACH TREES, PEAR TREES, APPLE TREES, CHERRY TREES, STRAWBERRIES, BLACKBERRIES, CURRANTS, BLUEBERRIES, ANNUALS ROSES, PHLOX, MUMS, ROSES, DAHLIAS**

**BOYSENBERRIES, BLACK CAPS, GRAPES, SHRUBS, PERENNIALS, EVERGREENS, ORNAMENTALS**

**Today for COLOR CATALOG**

**WRITE NEW**

**Pride-O-Mich TREES PLANTS**

**Embling Nurseries, Inc.**  
STEVENSVILLE MICHIGAN  
BOX-20

### AGICIDE SPRAY BASE

Containing Rotenone, controls many fruit insects such as aphids and red spider. No residue, nor injury to fruit, flowers, tree or shrub.

Write for name of nearest dealer

Please refer to this advertisement.

**AGICIDE LABORATORIES, Inc.**

Racine

Wisconsin

### Ottawa Self-Propelled Buzz Master

**CLEAR LAND FAST!** Powerful 6-HP motor with friction clutch for safe operation. Cuts down timber, brush and hedge; turn blade vertically and saw logs to length. Can be equipped to fell largest trees. Has clutch pulley for belt work. Fully guaranteed.  
**OTTAWA MFG. CO., 532 Brush Ave., Ottawa, Kansas**



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On Root Moisture!

Save your trees, plants, shrubs by "IrriVation". Sub-saturates deep, quick, easy by Hose Pressure—Saves "oceans" of water! Write for surprising facts and delivered prices—or send \$2.50 for 30" Galv. Pistol Grip model. Postpaid.

**THE "IRRIVATOR" CO.**  
989 Michigan, San Jose 10, Cal.

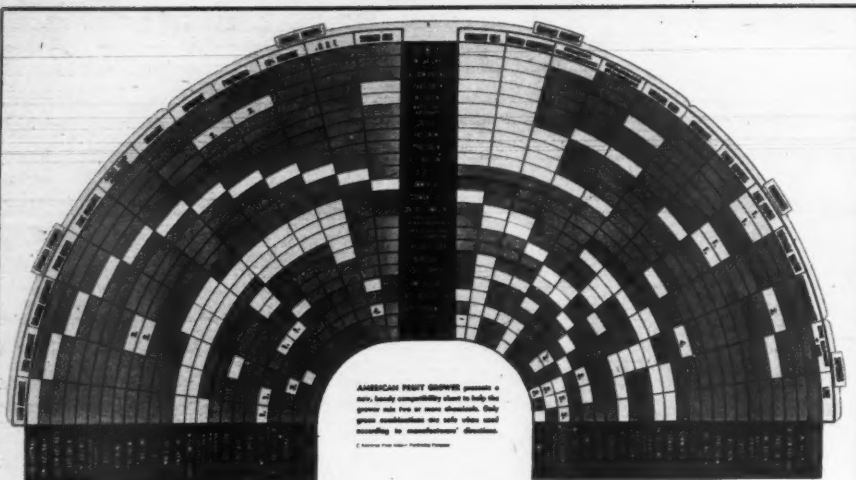
### JARI POWER SCYTHE CUTS CLOSE TO TREES

You can mow close to fruit trees, under fences and in corners with the JARI Power Scythe. Cuts where other mowers won't. No danger of breaking low branches. 36" sickle cuts weeds, brush, grass 1 1/2" from ground. Follows ground contour. Light weight, self-propelled, easy to handle... one man can cut 4-6 acres in 8 hrs.  
**WRITE FOR FOLDER**



**JARI PRODUCTS, Inc.**

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## New Compatibility Chart

Many fruit growers have asked for reprints of the new compatibility chart which was published in the February issue of **AMERICAN FRUIT GROWER**. This revised chart includes all the new insecticides and fungicides and is an accurate guide in mixing two or more chemicals. We have therefore decided to print a limited supply in colors on heavy paper stock and suitable for hanging on the wall. Single copies will be furnished free to readers on receipt of 10c to cover postage and mailing. Fill out the coupon.

**AMERICAN FRUIT GROWER**  
1370 Ontario St.  
Cleveland 13, Ohio  
Enclosed is 10c. Send Compatibility Chart to:

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State \_\_\_\_\_  
(Offer Good only in U.S.A.)

Advertisement



From where I sit ... *by* Joe Marsh

## Bert Solves the Labor Problem

You hear a lot about capital and labor nowadays, as if the two could never get together. But look at Bert Childers—who has 320 acres of producing land, a fair-sized herd of cattle, and two farm hands working for him.

If you went and called Bert a "capitalist" he wouldn't know what you meant, and neither would Spike and Sandy, the hired men. Bert works side by side with the both of them all day; and in the evenings they sit around the kitchen table together—sharing a friendly glass of beer or two.

If anybody has a beef—whether it's about wages or hours or equipment—they talk it over at those friendly evening sessions.

I don't say that all labor problems are as simple as Bert's are. But from where I sit, the basic principle applies to any farm or factory or business: A principle of mutual confidence and mutual respect, of daily talks together in a friendly and congenial atmosphere.

*Joe Marsh*

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## INCREASING FRUIT SET

(Continued from page 33)

tion. However, where pollinating conditions were excellent there was a reasonably good fruit set even on trees of low vigor. On the other hand, the set was poor in a few cases where the trees were growing too fast, as they sometimes do when too much nitrogen fertilizer is applied.

Aside from the vigor of the tree as a whole, it is clear that Delicious sets best on individual branches showing good vigor. It seems very desirable to prune out any branches making less than 4 inches of terminal growth in a year, for this promotes a higher percentage of fruit set, larger fruits, and repeated blossoming. This type of pruning tends to keep older trees in the same growth condition that prevails during the first few cropping years of the young tree.

This investigation did not indicate that geographical location or climate had much to do with the fruit set of Delicious in 1946, so long as the variety was hardy enough for the area. Some of the heaviest as well as some of the lightest Delicious crops were found within three or four miles of one another in Door county, Wisconsin, as a result of differences in pollinating conditions.

## NEGLECTED STEP-CHILD

(Continued from page 22)

step-children of fruits is because they can't be eaten out of hand. It would take a brave man to eat a raw quince. We tried it once and the first bite left our mail-order store teeth in the quince.

We'll bet any housewife that if she will make quince jelly, the kind her grandmother used to make, she can sell every last jar of it to her friends and neighbors and they'll come back for more. Quince jam is also a possibility. We never heard of a quince pie but it might be possible. Any good American should be willing to try anything once.

We've done a lot of grafting in our day but we never tried grafting quinces on an apple or pear tree. It should be possible. We've grafted pecans on wild hickory and pignut trees and it's no trick at all to graft apples on pears and vice-versa.

In your fruit tree order this spring, why not include a few quinces? And when you set them out, give them the same care you will give your other fruit trees. A few years from now you'll bless the writer for making this suggestion.

**AMERICAN FRUIT GROWER**



## UIT SET

(page 33)

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## CHILD

(22)

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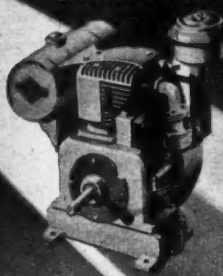
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OWER

## BRIGGS & STRATTON ENGINES



designed **RIGHT**  
built **RIGHT**...  
the **"RIGHT" POWER**  
for farm equipment

☆ Through twenty-seven years  
Briggs and Stratton 4-cycle en-  
gines have proved they stand up  
under severest service. No other  
air-cooled engines have such a  
record. When you buy farm ap-  
pliances and machinery "powered  
RIGHT by Briggs & Stratton",  
you get full benefit of the skill  
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stumps, splits rocks, disinfects poultry  
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No simple anyone can use it. Complete  
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seamless steel coil burner, 7 foot hose,  
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## NATIONWIDE FRUITS

(Continued from page 16)

### FIGS

young creatures swarm about it in-  
stinctively, sure that here is another  
of their old ancestral haunts, a caprifig  
tree in whose flowers they may pro-  
duce their own offspring. They bore  
their way into the hearts of the flow-  
ers, losing their wings or suffering  
other injury in their eager haste. Be-  
trayed, broken and bedraggled, they  
soon come out to die. But they have  
achieved a post-mortem miracle. For  
the caprifig pollen which they have  
unwittingly brought to the sterile  
flowers is the magic from which the  
Smyrna fig springs to claim full credit  
for its luscious goodness.

### APPLES

(Continued from page 17)

to time to prevent too much carbon  
dioxide to become concentrated in the  
storage atmosphere. This condition  
will cause the fruit to become alcoholic  
in a short time.

Using this new development, a home  
storage for apples can be designed  
by placing a 50 gallon steel drum  
with a removable head in a hole dug in  
a bank, or in the ground if a bank is  
not available. Apples can be safely  
stored in it as the temperature of the  
soil rarely rises above 50 degrees F.  
Two ¼ inch holes drilled in the lid,  
with the drum filled with apples, will  
maintain the exact desired concentra-  
tions of oxygen and carbon dioxide.

There is no danger of freezing the  
apples, as the heat of respiration will  
keep the temperature in the barrel  
above the freezing point. The apples  
should be quite firm and free of bruise-  
es when stored to assure best keeping  
qualities.

### BERRIES

● The Klonmore strawberry, cross  
between the Klondyke and Blakemore,  
has almost replaced the Klondyke en-  
tirely in Louisiana within the past  
five years.

The variety was developed by Dr.  
Julian C. Miller, horticulturist at the  
Louisiana State University Agricul-  
tural Experiment Station. A high  
yielder and good shipper, it does not  
have to be sprayed for leaf spot  
or scorch.

About 85 per cent of the 1946 acre-  
age was planted to the Klonmore  
berry.

*Our 100<sup>th</sup> year*



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since 1847

When you buy nursery stock get the full  
protection of Ilgenfritz' 100 years of ex-  
perience, extensive resources and sound  
policies. They are your best assurance  
of lasting satisfaction.

Your requirements will re-  
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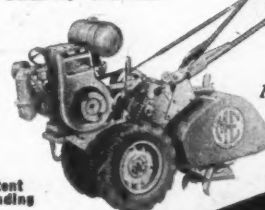
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consumer  
acceptance.

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tiller that will prepare  
a perfect seed bed. Will do  
a better job of tilling and cultivating  
than any other tiller on the market. Most  
reasonably priced, yet capable of greater per-  
formance.

• Mulches surface vegetation and natural fertil-  
izers • Makes soil more humus • Eradicates  
quack, Johnson and other grasses • Increases  
crop yield 15 to 40%.  
Power take-off models  
also available.

F.O.B. factory. With steel wheels or rubber  
tires. See your dealer or write for information  
and specifications of this rugged garden tiller  
and cultivator today.

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Without cost or obligation, please send me  
your folder "How to Prepare a Perfect  
Seed Bed."

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Address.....

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**SCHLICHTMAN'S U.S. APPROVED, PULLORUM CONTROLLED** chicks, per 100 prepaid. Leghorns, Rocks, Reds, Orpingtons, Wyandottes, Minorcas, \$9.90. Assorted \$7.45. Pedigree sired and sexed chicks. Free catalog explaining 2-week replacement guarantee. SCHLICHTMAN HATCHERY, Appleton City, Missouri.

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**CHAINS—TRACTOR, TRUCK, ROAD GRADER, BUS.** Write for circular, give tire sizes—Prompt shipment. HORNER TRACTOR SALES, Geneva, Ohio.

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Hardy Chrysanthemums, \$1.00. We wholesale, too. PAYNEE DAHLIA FARM, R. 5, Kansas City 3, Kans.

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**AERMOTOR WINDMILLS 8 AND 10 FT. 50 DOLLARS** each. Am quitting business. LEE McLAIN, 153—25rd Street, Richmond, California.

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**MAN—(SINGLE) VEGETABLE GROWING EXPERIENCE.** Eastern Agricultural College. Must be experienced. All year work. Excellent terms. Room, Board, Wages. P. O. BOX 551-V, Doylestown, Pa.

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**SAVE YOUR TREES WITH THE-TEX (TRADE-MARK).** Sold 41 states, Canada, Mexico in 1946. Used successfully at Orchardview since 1942. Keeps rabbits, mice, ground-hogs, gophers, from gnawing trees. Repellent for tree borer, and winterkill. Use in dust applications—2 to 10—it sticks. One pound for 50 to 100 trees. Can be applied in 1 hour. Applied when trees are set, lasts one year. Prices: 1 lb. \$1.00; 5 lbs. \$5.00; 10 lbs. \$9.00; 25 lbs. \$20.00; 50 lbs. \$40.00 prepaid. Testimonials and references on request. ORCHARDVIEW, E. L. ECKERLEY, Box 91, Noblesville, Indiana.

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*He's been showin' off like that ever since farmers voted 2 to 1 for the B. F. Goodrich kind of tread!*

The farmer who has tried different kinds of tractor tires on his farm is the man who knows most about tire traction. In a coast-to-coast survey of tractor farmers, the preference for the open tread—the B. F. Goodrich kind of tread—was 2 to 1 over other principal types combined! Farmers know they get more traction

from B. F. Goodrich tires because of the separate, unjoined bars. These bars, arranged in pairs, bite in with a steady pull. They keep on pulling because there are no pockets to clog up. The tread cleans itself. Work gets done faster.

The B. F. Goodrich dealer has these tires in stock now. See him before you buy.

An advertisement of The B. F. Goodrich Company, Akron, Ohio

**MORE PROSPERITY IN OREGON. GROW UP WITH** Western Oregon. Development. Splendid Openings for Dairymen or General Ranching. Professional, Dentist, Lawyers. Profit from Timber Income. No cold weather or bad winds. Contact HENRY C. KELLEY, Realtor, Bank Building, Sutherlin, Oregon.

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**HARDY GRAFTED NUT TREES, CRATH CARPA-** thian Black Walnut, Black Walnut, Butternut, Hestnut. Price list on request. BERNATH'S NURSERY, R.D. 1, Poughkeepsie, New York.

**FINEST FRUIT TREES GROWN ON SUNNY SLOPES** of Ozark mountains. 5,000 to 1/2 million trees based on contract at special quantity prices, fall 1947, delivery. State size and number of each variety wanted. Send us your order before May 1, we will start budding May 15, 1947. CLARKSVILLE NURSERY COMPANY, Clarksville, Arkansas.

**BEARING FILBERNUTS, PLANT AN ORCHARD—100** surplus, 4 to 5 foot twice transplants full fibrous roots. Variety "Pal and Dutchy" friendly pollinators. Produce the large commercial nut. Regular price \$5.00, purchaser can take all or not less than 10 at \$2.50. H. H. CORSAN, Hillsdale, Michigan.

**DEPENDABLE FRUIT AND NUT TREES, SMALL** fruits, Ornamentals, and General Nursery Stock Combined catalogue and Planting Guide free. CUMBERLAND VALLEY NURSERIES, INC., McMinville, Tenn.

**STRAWBERRY PLANTS VARIETIES—AROMA, KION-** dale, Blakemore, Missionary, Dunlap \$4.00 per M. Progressive Everbearing \$7.00. VERNON LACKEY, McDonald, Tennessee.

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**STREAMLINER EVERBEARING STRAWBERRY** starts bearing 60 days after set, and continues till killing frosts in fall. Bright red. Sweet. Numerous size but never hollow. No waiting 3 crops in 18 months. 200 plants sufficient for average family use. Prices greatly reduced. 25 for \$2.00; 50 for \$3.00; 100 for \$4.95; 200 for \$7.95; 500 for \$16.00; 1000 for \$30.00; 5000 for \$125.00. Prepaid. SOUTH MICHIGAN NURSERY (Order Dept.), New Buffalo, Michigan.

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**WE HAVE NEW VARIETIES APPLE AND PEACH** trees to offer. Write for description and prices for fall planting. VIRGINIA TREE FARM, Woodlawn, Virginia.

**FOR SALE FRUIT TREES, BLIGHT RESISTING** Chestnut trees. Fruit tree and Seedlings and Root grafts. VIRGINIA TREE FARM, Woodlawn, Virginia.

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**31 ACRES—HALF APPLES, PEACHES, PARS, CHERRIES,** others. Storage, barn, henhouse, toolshed, Five room house. Modern. \$15,000.00. HARVEY SCHUTT, Webberville, Michigan.

### PATENTS

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**PEAFOWL, PHEASANTS, BANTAMS, GUINEAS,** Ducks, Geese. Thirty Varieties Pigeons. Free Circular. JOHN HASS, Bettendorf, Iowa.

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**RAISE GIANT CHINCHILLA RABBITS, YEAR ROUND** income. Ideal occupation. Tremendous demand for gorgeous furs, delicious meat. Great scarcity means large profits. We buy your youngsters. WILLOW FARM, R33, Sellersville, Pa.

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**FOR SALE BLACK WALNUT SHELLING PLANT LO-** cated in Virginia. Address BLACK WALNUTS, AMERICAN FRUIT GROWER, 1370 Ontario Street, Cleveland 13, Ohio.

### SITUATION WANTED

**EXPERT. ORCHARDIST—TO. MANAGE. PROVEN** orchard. Housing. Salary. incentive plan. Middle-aged. Married. No children. Integrity. Sobriety. Highest References. WRITE BOX 65, AMERICAN FRUIT GROWER, 1370 Ontario Street, Cleveland 13, Ohio.

(Continued on page 43)



## OPPORTUNITY ADS

(Continued from page 42)

### SWEET POTATO PLANTS

SWEET POTATO PLANTS. NANCY HALL, PORTO RICO. 200 \$1.00; 500 \$1.50; 1000 \$2.50. D. & C. PLANT COMPANY, Gleason, Tennessee.

SWEET POTATO PLANTS. IMPROVED PORTO RICO. NANCY HALL. 200 \$1.00; 500 \$1.75; 1000 \$3.00. Prompt shipment and safe arrival guaranteed. J. D. DELLINGER, Gleason, Tennessee.

SWEET POTATO PLANTS. PROMPT SHIPMENTS. Satisfaction guaranteed. Porto Rico—Nancy Halls. Please send remittance with order. 500 \$1.45; 1000 \$2.50; 2000 \$1.75. GUINS PLANT FARM, Sharon, Tennessee.

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SWEET POTATO PLANTS. IMPROVED NANCY HALLS or Porto Rico. Grown in sunshine, strong, vigorous, well rooted. Carefully packed. Quick shipments. Postpaid. 200 \$1.00; 500 \$1.75; 1000 \$3.00. SMITH PLANT FARM, Gleason, Tennessee.

SWEET POTATO PLANTS. NANCY HALLS—PORTO RICO. Strong well-rooted plants. Our plants are healthy. They are packed so that they will arrive in good condition. Prompt shipment. Satisfaction guaranteed. Your business appreciated. Send no money—pay when received. 500 \$1.50; 1000 \$2.75; 5000 \$12.50; 10,000 and over \$2.25 per 1000. WHOLESALE PLANT FARM, Sharon, Tennessee.

### TREE BANDS

EARLY BIRD TREE BANDS CHEMICALLY TREATED. While the Codling Moth. Send orders early. EDWIN H. HOUER, Sauanuck, Michigan.

RETA-NAPHTHOL TREATED TREE BANDS. THEIR use will conserve the amount of expensive insecticides necessary to control codling moth. M. A. KOELLER, Barry, Illinois.

### TURKEYS

RAISE TURKEYS THE NEW WAY. WRITE FOR FREE information, explaining how to make up to \$3,000 in your own backyard. Address. NATIONAL TURKEYS INSTITUTE, Dept. 253, Columbus, Kansas.

### WANTED TO BUY

WANTED. ORCHARD DUSTER. BERNARD WOLKE, Frosbridge, Illinois.

### WELDING

MAGIC ELECTRIC WELDER, 110 VOLT AC-DC: welds, brazes, solders, cuts all metals, easy to use; full directions. Complete with power unit, flame and metallic arc attachments, carbons, fluxes, rods, mask. Guaranteed One Year. Only \$19.95. Used by the Navy. Splendid for farm use. MAGIC WELDER MFG. CO., 241 LS Canal St., New York, New York.



**"Front Please!"**

means much more at  
**THE DRAKE**

Each summons reminds you once again that the Drake's reputation is based solidly on co-operative effort, gracious living, fine dining

... all under owner-management. Yes, Front Please means more at the

**DRAKE**  
Chicago

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PRESIDENT



Write for  
Bulletin



## GROW Better FRUITS

Protect your crop economically and effectively with a Howry-Berg "Heavy-Duty" Vineyard Duster.

### Features:

- Positive feed, any type material.
- Powerful eight blade fan.
- Welded steel unit.
- One man operation.
- Two models: Tractor mounted and powered or mounted on steel frame powered by gas engine.

Write for bulletin.

**Howry-Berg Steel & Iron Works**  
2949 N. Speer Blvd. Denver 11, Colorado

# Stauffer Sulphurs

BACKED BY OVER 60 YEARS OF "KNOW HOW"

## STAUFFER CHEMICAL CO.

420 Lexington Avenue, New York 17, N. Y.  
221 N. LaSalle Street, Chicago 1, Illinois  
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## RASPBERRY PLANTS

READY FOR IMMEDIATE DELIVERY—WILL BEAR THIS SUMMER

Heavy Plants, 2 year. Transplanted Per 10 Per 25 Per 100  
\$3.00 \$7.00 \$25.00

INDIAN SUMMER. Everbearing Red. Bears in June and September

MORRISON. Black. Berries averaging almost one inch across.

SODUS. Purple. Most productive of all raspberries.

Guaranteed to grow. Add 5% for postage. Cash with order or C.O.D.

### RASPBERRY COLLECTION (Group No. 708)

THIS COLLECTION SHOULD YIELD AN AMPLE SUPPLY FOR AN AVERAGE FAMILY. 30 Raspberry plants, 2 year, Transplanted, ready to bear this Summer (10 of each variety listed) for only \$8.00 (add 40c postage).

STERN'S NURSERIES,

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GENEVA, N. Y.

## APPLE TREES

DIRECT FROM GROWER TO PLANTER  
SEND FOR LIST

**WILLIS NURSERY CO.**

Established 1872

OTTAWA, KANSAS

## D. B. West & Son

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FRUIT TREES ORNAMENTAL  
SMALL FRUIT PLANTS TREES AND SHRUBS

PERRY, OHIO.

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M. J. Beck Co., Box 7, Lansing 1, Mich.

## KER-O-KIL WEED BURNER

Burn weeds and brush. Disinfect poultry and livestock quarters. Heat water and branding irons. Many farm uses.

Models from \$19.00 up.

Write for free circular No. 12

**Ker-O-Kil Manufacturing Co.**

Gettysburg, Pa.

Or Redwood City, California



## FOR WHOLE ROOT, Early Bearing

Golden Delicious, Double Red Jonathan, Double Red Delicious Apple, Indian Heart Plum, Black Giant Cherry, Peach, Pear and Apricot trees.

Reasonably priced. Write for complete list.

GOLDEN EAGLE NURSERY, Golden Eagle, Illinois

## FRUIT TREES

Planters  
Grades at  
Planters

Prices. Peach, Apple, Pear, Plum and Prune, Cherry. Write for Prices. Drop a card for Free copy of our catalog.

**CHAMPION NURSERIES**

150 MAIN STREET • PERRY, OHIO

# Ramblings

## OF A HORTICULTURIST

### Southward Bound

**L**EAVING behind the chilly skies and bleak countryside of a typical Ohio winter, your Rambling Horticulturist set out recently for a jaunt through the southland, planning to visit growers and horticulturists all along the way.

Knoxville, Tennessee, where the University of Tennessee is located, marked the first part of the trip. Because Tennessee is a major strawberry producing state, as well as a heavy peach producer, one might well expect most research work to be done with these fruits. Such is not the case, however, as Tennessee horticulturists, anxious to increase the productiveness of the state's fruit crops, are conducting considerable research and extension work with apples, grapes, boysenberries and youngberries. Tests on pruning, fertilization, cultural practices and contour planting are a few that are being carried out to help answer the problems that perplex Mr. Grower. Experiments in the processing of fruit, especially freezing, are also in progress.

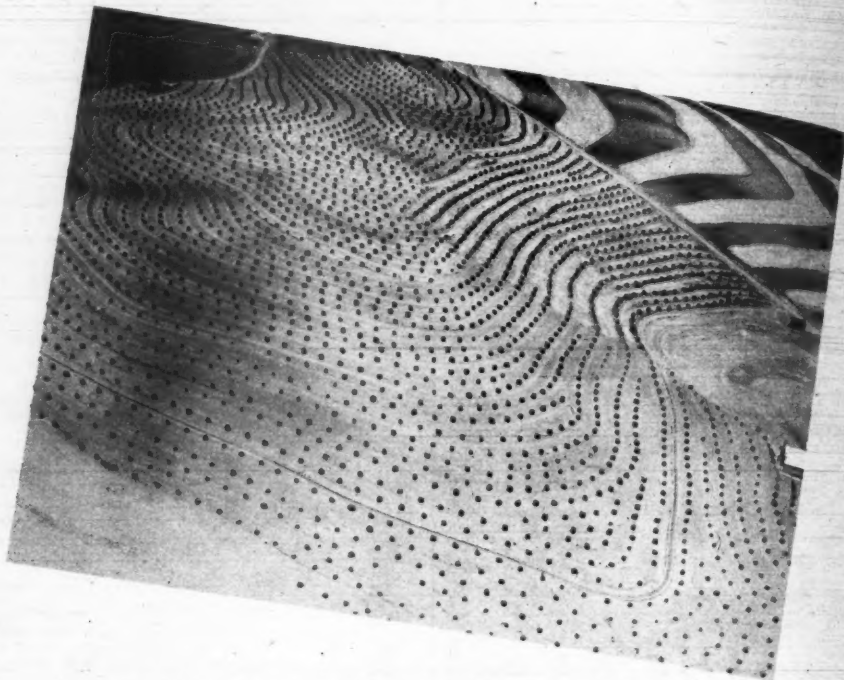
**Tennessee's Department** of Horticulture is contributing a great deal to the fruit industry of the state, and full credit should go to Dr. N. D. Peacock, head of the department, Dr. Brooks Draine who conducts work in fruit breeding, and Professor T. H. Jones, who directs the small fruit investigations. Professor A. E. Mitchell, who contributes most of his time to extension work, is an excellent research worker and is doing considerable work with tree fruits. One of Professor Mitchell's many admirable qualities is his unflinching desire for accurate facts and correct conclusions.

All too soon came the hour of departure on the next lap of the trip and with a great deal of regret your Rambling Horticulturist bid adieu to the Tennessee horticulturists with their many promising experiments and ambitious programs, and headed deeper south.

**Much has been said** about the gigantic peach industry of South Carolina, and the desire to have a first hand look at the business led me to Spartanburg, the peach grower's capital. Mr. F. E. Cronenberg, assistant manager of the South Carolina Peach Growers' association told me they had had their biggest ship-

excellent for canning and freezing.

**South Carolina** growers have learned that the redder their land, the better it is for growing peaches. They also know that elevation above surrounding areas is important in frost protection. Particularly noteworthy is their soil conservation



Aerial view of a contoured peach orchard in South Carolina.

ping year to date. In 1946, 9,358 cars of peaches were sent to the fresh market and an additional 7,000 cars rolled to processing plants where the peaches were canned or frozen. And the state has not yet reached peak production. In fact, plantings are continuing and many trees will be planted this winter.

**Lunching with** Mr. James A. Harmon, president of the Association, I learned much about the production problems of Carolina peach growers. Mr. Harmon himself operates an orchard with approximately 200 acres of peaches as well as 80 acres of apples. Eighty per cent of the state acreage is in Elbertas, but many of the newer plantings are being made to other varieties, such as Triogem, Red Haven, Sun High and Early Elberta. These varieties are

practice of planting their orchards on the contour and on terraced land. Fertilization is heavy, up to 8 pounds per tree. Because his fertilizer analysis (4-8-8) is lower in nitrogen content than is generally used, he will use a heavier application.

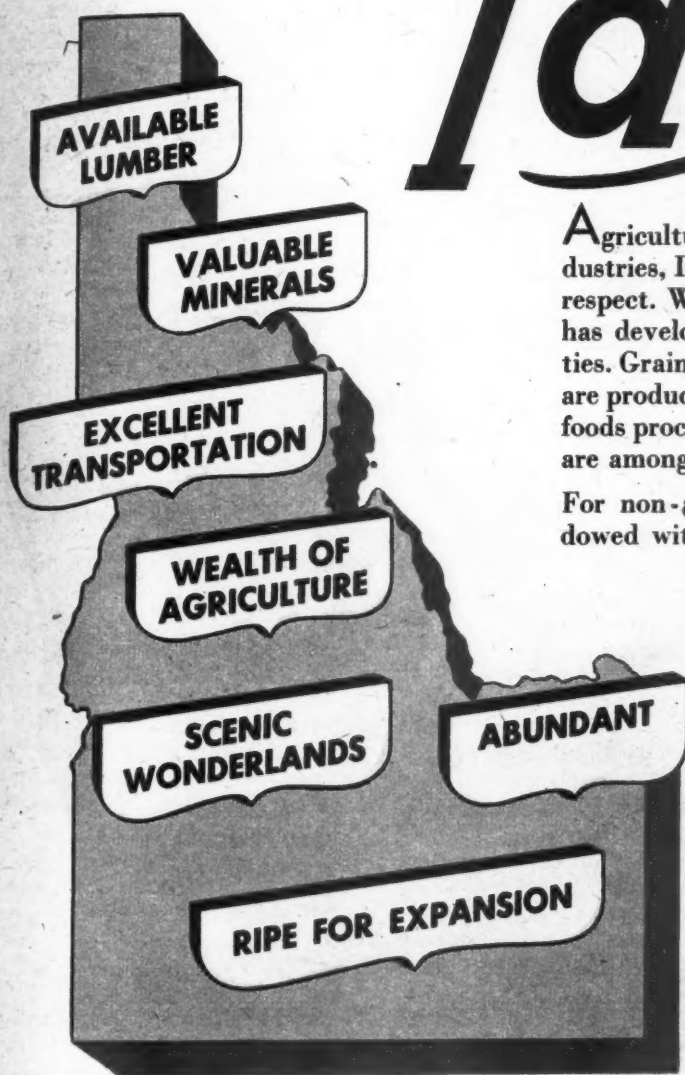
South Carolina peach trees are pruned low and open so that all picking is done from the ground, the accepted practice in the South. Almost every grower with any amount of acreage has his own packing house where he grades and packs his own fruit. Most growers who do this sell their fruit through the cooperative South Carolina Peach Growers' Association.

Once again time pressed my travel schedule, and with a brief backward glance at the fruit industry which thrives so well in the Carolinas, I journeyed on south.





# Idaho\*

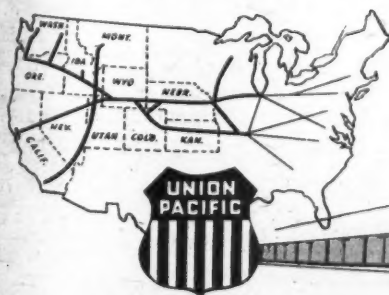


Agriculture being the life-blood of many industries, Idaho is particularly fortunate in that respect. World-famous for the Idaho potato, it has developed many other agricultural activities. Grains, vegetables, fruit... cattle and sheep are produced in abundance. Dehydration, frozen foods processing, dairying, canning and packing are among the state's flourishing industries.

For non-agricultural industries, Idaho is endowed with rich veins of minerals. Numerous manufacturers of stone, clay and glass products have established plants in Idaho. Lumber for building and wood products is available. Unsurpassed rail transportation is provided by Union Pacific.

As a vacation region, Idaho has a wonder-world of its own in Sun Valley... year-round sports center... the world famous primitive area... and in the scenic surroundings of Payette Lake.

Idaho is a young thriving state, ripe for further industrial development. It offers good living and working conditions, good schools, splendid cultural advantages... and its energetic citizens assure newcomers of a true western welcome.

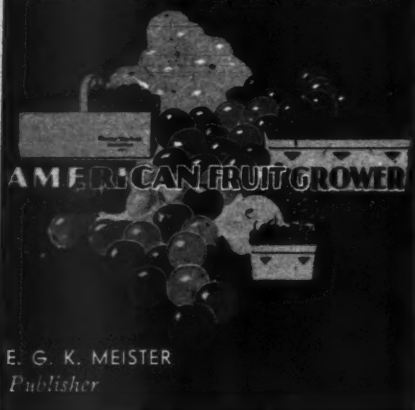


\* One of a series of advertisements based on industrial opportunities in the states served by the Union Pacific Railroad.

\* Address Industrial Department, Union Pacific Railroad, Omaha 2, Nebraska, for information regarding industrial sites.

**UNION PACIFIC RAILROAD**  
THE STRATEGIC MIDDLE ROUTE

## EDITORIAL PAGE



E. G. K. MEISTER  
Publisher

### Leading the Way

**F**RUIT growers lead the way in agricultural housing. Employing great numbers of farm workers, the nation's orchardists set standards of good housing and successful worker relations for other classes of agriculture.

In recent years, families of farm workers have been replacing the unmarried transient worker. With this trend has come the added responsibility of providing good living conditions for women and children. This responsibility falls on the grower.

Instead of barracks or bunkhouses, the agricultural worker now requires a cottage where his wife can keep a comfortable home for their children, and where the all-important small comforts of life can be provided.

Fruit growers, to their credit, have led the way with modern cottages and duplex homes, equipped with many of the conveniences often considered possible only in the city. Provisions for electrical equipment, adequate bathing facilities and good cooking equipment have become standard at many orchards.

More and more, this trend is becoming the established practice. In some areas, grower associations are providing group housing for transient workers.

The forward looking attitude of fruit growers in being first with good housing is heartening. The fruit industry stands ready now, as always, to lead the way in agriculture.

### Fair and Warmer

**E**XPERT fruit growers develop what has become known as "weather sense." They plant at just the right moment, spray when it does the most good and pick and market their fruit at the right time. A weather eye can be cultivated by becoming weather conscious. Thinking about the weather, anticipating changes and recording maximum and minimum temperatures

in various parts of the orchard will do much to awaken the weather instinct, which undoubtedly at one time was one of the protective talents of ancient man.

In the realm of science fruit growers are offered an unusual opportunity to master weather problems. The forecast of "Your Weather This Spring" by Dr. Irving P. Krick in the March issue of *AMERICAN FRUIT GROWER* was a reliable and accurate prediction for fruit growers all over the United States. It indicated to Pacific Coast growers the need of applying dormant sprays early. It suggested to the Carolina and Georgia peach growers consideration of a new marketing problem and it promised northern growers a late blossom period. It also established the time when blossoms would grace the festivals which have become such a spring time delight.

With good weather sense and knowledge of the science of meteorology fruit growers need worry little about the weather.

### All Aboard—Wenatchee, Yakima, Hood River

**A**NNOUNCEMENT that the National Apple Institute will hold its annual meeting June 12, 13 and 14 in Wenatchee, Washington is good news for Eastern growers who now will have a chance to view at first hand the irrigated apple growing sections of the Pacific Northwest where production can reach as high as 1400 boxes to the acre.

The modern traveler can reach Wenatchee in an easy day's journey by plane or several days by train. But despite the speed and simplicity of today's travel, a visitor to the Northwest cannot help but feel a little of the adventure of the early explorers such as Lewis and Clark when they blazed their historic trail from St. Louis to the Oregon territory in 1804 and 1805.

Secretary Truman Nold is arranging various trips to Wenatchee from the Midwest and East. Depending upon preference indicated, one group may go via Banff and Lake Louise, ending with a 250 mile bus trip through the apple country of British Columbia and Washington. Another trip may go via Glacier National Park. In addition, tours of the apple country will be arranged after the meeting ends. Details can be obtained by writing to National Apple Institute, 726 Jackson Place, N.W., Washington 6, D. C.

This is a marvelous opportunity for growers of the East and Midwest to kick over the traces, savor the aura of new sights in a new land, and at the same time give well-deserved support to the National Apple Institute.

### Bud to Blossom Hazard

**W**HEN the buds swell into bloom is the most hazardous time in fruit growing. Frosts, winds and rain may conspire to rob the fruit grower of his crop, but so many factors affect blooming that a complete loss in commercial orchards is rare. The patient fruit tree has many a trick up his sleeve.

From the time fruit buds begin to swell, until the fruit is formed, marks successive stages in hardiness. For instance, apple buds still dormant will endure temperatures well below zero without injury. As they swell, however, resistance to cold decreases until the time of full bloom when temperatures 28 degrees F. or below will kill. Hardiness to cold continues to decline until after the trees set fruit when 30 degrees F. may cause injury.

Since the canny apple tree does not bloom completely at one time but brings some buds out sooner than others, often an early frost will serve to thin the crop by killing the early blooms but sparing the retarded, and thus most resistant, flowers.

Differences in hardiness of flowers also exist between varieties as well as between flowers in different stages of development. The Wealthy apple is one of the most hardy trees and often will come through a frosty spring when other varieties will not. Although peaches bloom earlier than apples and thus are more susceptible to frost, peach flowers will withstand a harder frost than apple flowers.

Differences in time of blooming of varieties also guard against a complete loss. Rome Beauty and York Imperial, two late blooming varieties often bear crops when earlier varieties such as Delicious will fail.

Strangely enough, more vigorous trees tend to bloom later than weaker trees although this is by no means a consistent phenomenon. But, here is still another way fruit trees spread their bloom so as to increase chances for a set of fruit.

As many growers have noticed, a cold blooming season will extend the time of bloom whereas a hot, sunny bloom period will last but a short time. Since apple trees generally need cross-pollination to set a commercial crop, the lengthened bloom during cold, perhaps rainy, weather gives better chances for occurrence of a warm day when the bees will spread pollen through the orchard.

The bud-to-blossom hazard causes many an anxious glance at the barometer and thermometer, plus careful scrutiny of the sky. But the wise fruit tree, by spreading his risks, does his full share to insure a crop.



Hazard

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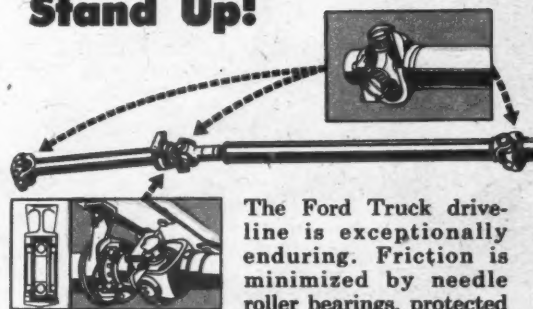
Hard work all the year 'round is the lot of the Ford Trucks operated by Sta-Packing Corporation, orange and grapefruit farmers and marketers of Tula County, California. Secretary F. C. Rickey writes: "It's a pleasure to tell you how pleased we are with the reliability, low operating and maintenance cost and excellent service we get from our Ford Trucks! We heartily recommend them to anyone looking for equipment that will last a long time at minimum expense."

# "FORD TRUCKS LAST LONGER!"

**ONLY FORD GIVES YOU ALL THESE LONG-LIFE TRUCK FEATURES:** Either of two great engines, the V-8 or the SIX, both with full pressure lubrication to all main, connecting-rod and camshaft bearings, Flightlight oil-saving 4-ring pistons, precision-type heat-resistant bearings and fast-warmup temperature control • rear axle design that takes all weight load off the shafts ( $\frac{3}{4}$ -floating in half ton units, full-floating in all others) • heavy channel section frames, doubled between springs in heavy duty models • big, self-centering brakes, with heavy, cast drum surfaces, non-warping and score-resistant—all told, *more than fifty* such examples of Ford endurance-engineering.

**NATURALLY, FORD TRUCKS LAST LONGER!** Latest 1946 registration figures show that 78% of all 1936 model Ford Trucks in use 9 years ago are still on the job! That's up to 15.8% better than the records of the next four sales leaders—5% better than the average of all four. More than 100 body-chassis combinations. See your Ford Dealer!

## ONE Big Reason— Ford Drive-Line Units Stand Up!



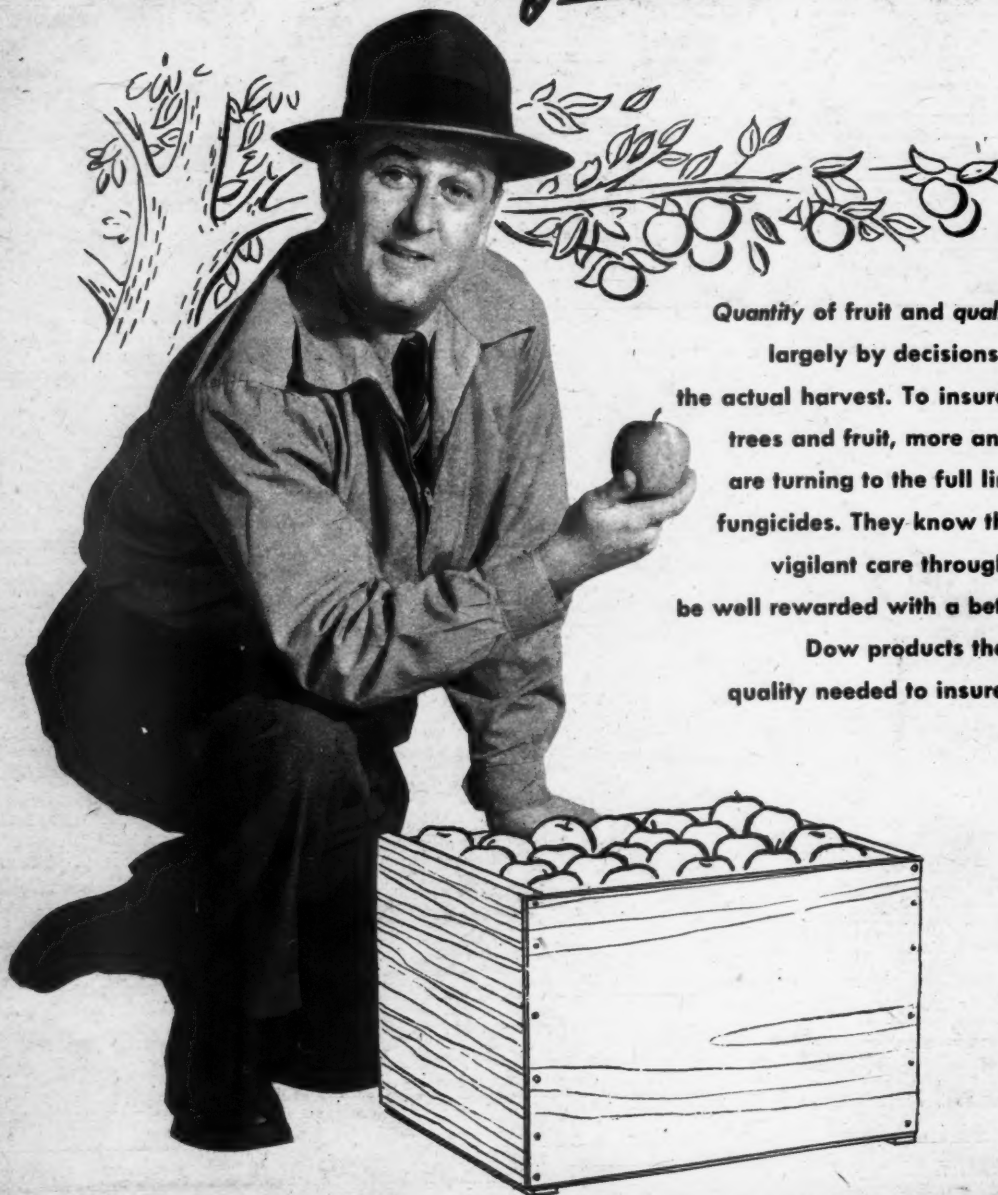
The Ford Truck drive-line is exceptionally enduring. Friction is minimized by needle roller bearings, protected by relief fittings, in all universal joints in all models. Half-ton chassis have two such joints. All other models (except 101" w.b.) have three, and, in addition, a heavy duty ball center bearing. This bearing is self-aligning—cushion-mounted in live rubber. It is leakproof, excluding dust and water. It is unaffected by frame flexing and is notably long-lived. Large-diameter tubular steel propeller shafts with forged ends are properly balanced. This assures freedom from destructive vibration and great strength without excess weight.

Ford

**MORE FORD TRUCKS IN USE TODAY THAN ANY OTHER MAKE**

MAY, 1947

# What will your harvest be?"



Quantity of fruit and quality of fruit are both governed largely by decisions made now—long before the actual harvest. To insure full protection of valuable trees and fruit, more and more growers each year are turning to the full line of Dow insecticides and fungicides. They know that an early start and vigilant care throughout the growing season will be well rewarded with a better crop—and they find in Dow products the dependable high quality needed to insure complete control.

*For more fruit  
—better fruit!*

Dow DDT-50%-Wettable is highly effective as an insecticide, since it possesses microscopic fineness and adheres properly to foliage and fruit. Its finely divided nature permits an even distribution of a long lasting residual film—essential for good insect control. Dow DDT-50%-Wettable has also proved especially valuable as a spray or dip for livestock and as a spray for barns and other farm buildings. For recommendations consult your State Experiment Station or local County Agricultural Agent.

## DDT-50%-Wettable

And to control red mite, use DN-111—alone, in combination with Dow DDT-50%-Wettable, or other spray materials. If you prefer to dust, DN-Dust D-4 retains toxicity long enough to kill mites hatched 4 or 5 days after trees have been dusted.

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